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Impact on the engagement of at-risk students: evaluation of postsecondary living learning communities

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**IMPACT ON THE ENGAGEMENT OF AT-RISK STUDENTS: EVALUATION OF
POSTSECONDARY LIVING LEARNING COMMUNITIES**

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

In

The Department of Educational Theory, Policy, and Practice

by

Monique Fondren Cain
B.S., Louisiana State University, 2000
MPA, Louisiana State University, 2005
May, 2012

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“For I know the plans I have for you,” declares the LORD, “plans to prosper you and not to harm you, plans to give you hope and a future (Jeremiah 29:11, New International Version).

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ABSTRACT

Colleges and universities have first-year residential living learning programs that use academic and social programming to contribute to students' academic success. While a variety of students choose to live in these living learning communities (LLCs), there is little research on the benefits derived by specific groups of students. Students who are classified as at-risk, including first generation and / or from families challenged by low income levels were targeted for this research. The engagement of these at-risk students participating in LLCs was the focus of this mixed methods study.

The research questions addressed by this study were directed toward understanding how participation in LLCs effect the engagement of at-risk students and how students' perceived the benefits of support opportunities. In addition, a comparison of the perceptions of students who lived in LLCs that were discipline-specific with those who lived in non-discipline specific LLCs was made. This mix methods study was retrospective in nature given that sophomore students were asked about their first year experiences and opportunities. Surveys about perceptions of student engagement were administered to at-risk students participating in LLCs and traditional residence halls (TRHs) followed up by individual and focus group interviews to gain deeper insights about their experiences.

More positive perceptions were reported by at-risk students with respect to academic integration and institutional climate in LLCs compared with TRH students and more positive perceptions were reported by at-risk students with respect to academic integration in discipline specific LLCs compared with non-discipline specific LLCs. In addition, the study results revealed distinctive faculty-student interaction within discipline specific LLCs and beneficial

support opportunities. These beneficial support opportunities included LLC faculty office hours, peer study groups, sponsored events, faculty supplemental instruction and tutoring, rector advising, and faculty discussion groups.

Findings from this inquiry have the potential to contribute to theory, practice, policy, and future studies of learning communities in higher education. Recommendations were made by the researcher from the study's findings that included incorporating a second year LLC program, co-curricular programming for TRHs, and increased student exploration of their major field in non-discipline specific LLCs.

INTRODUCTION

Statement of the Problem

Tinto (1987) stated, “Interactive experiences which further one’s social and intellectual integration into the academic and social life of the college are seen to enhance the likelihood that the individual will persist within the institution until degree completion” (p. 115). In his longitudinal study on student dropout prevention, Astin (1975, 1999) found that living on-campus “was positively related to student retention, and this positive effect occurred in all types of institutions and among all types of students regardless of sex, race, ability, or family background” (p. 523). Many colleges and universities have first-year residential living learning programs that use academic and social programming to contribute to students’ academic success. In the literature and in practice, these programs are often referred to as living learning centers or living learning communities (LLCs).

Students that reside in these LLCs may have characteristics that influence their college persistence. Students whose persistence may be at risk are defined in numerous ways by researchers. Becker, Krodel, and Tucker (2009) stated in their book focusing on under-resourced (low income) college students:

Under-resourced students usually lack the intergenerational transfer of knowledge about higher education because few or no family members have college experiences to share with them. To first generation college students, the concepts of provosts, major advisers, independent studies, financial aid rules, and scholarships often are unfamiliar, making the landscape of the college and its departments quite literally ‘foreign’ territory. (p. 3)

Inkelas, Daver, Vogt, and Leonard (2007) found that first generation college students participating in LLCs perceived ease with their academic and social transition to college.

Rocconi (2011) argued that researchers assessing learning communities “study the effects of

learning community participation on education but examine the effects of learning community participation on student engagement as well” (p. 188).

For the purposes of this study, the researcher defines an at-risk student as a: first-generation college student (neither parent graduated from a four-year college) and / or low-income student (family’s income is less than or equal to 150 percent of the poverty level) (University, 2011). These types of students attend postsecondary institutions and some participate in LLCs.

Purpose of Study

The purpose of this study is to explore LLC at-risk students’ perception of their student engagement encompassing academic and social integration, institutional climate, peer collaboration and personal growth, and to identify beneficial LLC support opportunities. The findings from this research should be of value to postsecondary institution administrators, in particular those in housing and student affairs. The researcher is a housing professional employed at a research intensive university in the Residential Life Information Systems area. In addition, the researcher was both a first generation college student and low income challenged during her undergraduate education.

Many strides have been taken at this particular university to increase LLC support, facilities, and technology in the residence halls. Such strides include diversification of both non-discipline specific and discipline specific LLCs, increased faculty and support positions, community technology spaces such as complete wireless coverage encompassing student living quarters and common areas (e.g., lobbies, courtyards, study rooms) for students to collaborate, smart classrooms for faculty to teach courses in the community, improved group study and

conference rooms, faculty and peer tutor sessions, and enhanced academic and social programming and planning. This study would add to growing body of research concerning perceptions of at-risk students' engagement, issues and needs, academic and social integration, institutional climate, peer collaboration and personal growth, and beneficial support opportunities for LLCs.

Rationale

The rationale of this study is to obtain a deeper understanding of LLC at-risk students' engagement. This research could enhance the knowledge base of at-risk students' academic and social needs and student perceived issues. Inkelas and Soldner (2011) argue that many institutions are not achieving their student outcomes in various areas such as learning communities because of the "lack of systematic focus on research on their effectiveness in delivering student learning outcomes they are designed to promote" (p. 1). In a study concerning first year college students, Inkelas et al. (2007) found LLCs to be more beneficial to college transition for first generation college students when comparing them to traditional residence hall (TRH) students. In addition, the study's sample was active living learning participants and these researchers commented that living learning participation may not be understood fully by students until time has lapsed for reflection.

Inkelas and Soldner (2011) explain the need of continued research for intervention programs like LLCs:

What is at stake regarding these programs is a central foundation of higher education's purpose. Yet, before and since the advent of the National Study of Living-Learning Programs, little is known about the effectiveness of these interventions, and what is known is inconsistent or of modest impact. When considering that, by only one estimate, there are over 600 living-learning programs in existence (Inkelas et al., 2007), campuses'

investment in these programs is not waning. Thus, for as long as living-learning programs are seen as mechanisms for improving undergraduate student learning, their inherent value should continue to be assessed, and assessed in increasingly effective ways in the United States. (p. 51)

Pike, Kuh, and McCormick (2011) found that participation in a learning community was related to increased academic efforts, critical thinking, positive faculty student interaction, and active collaborative learning by first year students. These researchers assessed that their results help to advance research linking learning community participation and student engagement. This study's sample was comprised of 15 percent of research intensive institutions.

Furthermore, Pike et al. (2011) express the need of examining learning communities' "complex interactions of learning community design, student characteristics, and institutional settings. In order to maximize the potentially positive effects of learning communities, intentional, contextualized design and implementation efforts are needed" (p. 317). Inkelas and Weisman (2003) requested future studies of LLCs by design type with a focus on minority groups.

Laufgraben, Shapiro, and Associates (2004) listed broad basic characteristics of all learning communities to include components that help make the transitions to college more seamless and purposeful in the student's first year experience. These authors explained that learning communities help students and faculty interact in smaller groups, encourage development of student academic and social participation, help expectations of college become more transparent because of the environment, create purposeful and meaningful faculty interaction, emphasize on learning outcomes with both faculty and students, provide specialized academic support, and increase examination of the first year experience (Laufgraben et al., 2004).

Becker et al. (2009) list challenges that first generation and low-income college students face when attending postsecondary institutions and concluded their persistence may be at risk because of these challenges. These challenges include the lack of intergenerational transfer of knowledge and familiarity with college experiences, financial aid rules, navigation of the college landscape, etc. Pascarella and Terenzini (1991, 2005) said that many theories and traditions do not thoroughly explain the connection between a student's environment and learning community impact on persistence and degree completion. However, these authors expressed, "the environment is acknowledged to have an important influence on [the individual's] development" (Pascarella & Terenzini, 1991, p. 46). In a study examining student engagement and institutional impact of 20 institutions, researchers concluded that learning community research is deficient in many areas including institutional differences and their impact on these intervention programs and student engagement (Kezar & Kinzie, 2006).

More recently, some studies later associated academic success with participation in LLCs. In particular, studies focused on student engagement of at-risk LLC students are deficient specifically in the area of low income students. My research focused on a defined group of at-risk students' perception of their student engagement encompassing academic and social integration, institutional climate, peer collaboration and personal growth, and beneficial LLC support opportunities. The study was retrospective perception in that these LLC students' first year experiences and opportunities were assessed in their second year of college.

Research Questions

Many questions are of particular interest to the researcher concerning at-risk students' participation in LLCs, but the following research questions have been regarded as the most important to the scope of this study:

- RQ1: How does participating in a living learning community affect first year at-risk students' engagement dimensions of:
 - ❖ Academic integration
 - ❖ Social integration
 - ❖ Institutional climate
 - ❖ Peer collaboration and Personal growth
- RQ2: What living learning community support opportunities are perceived as most beneficial in supporting the development of at-risk first year students?
- RQ3: Does at-risk students' participation in a living learning community result in greater student engagement compared to students not participating in a living learning community?
- RQ4: Is there a difference in student engagement with at-risk students participating in discipline specific living learning communities compared to non-discipline specific living learning communities?

Significance of Study

Pascarella, Terenzini, & Blimling (1994) noted that students that live on-campus versus those living off campus have the “strongest and most consistent positive influence in the areas of social / extracurricular involvement, satisfaction with college, persistence in college, and degree attainment” (p. 27). The significance of this study is to provide a deeper understanding of the effects of postsecondary LLCs on at-risk students' engagement. The study evaluated defined at-risk students' perceptions of their student engagement encompassing academic and social integration, institutional climate, peer collaboration and personal growth, and beneficial LLC support opportunities. Pascarella and Terenzini (2005) noted that studies focused on learning

communities have “measured student learning almost exclusively with student self-reported gains” (p. 109). However, the current study includes a qualitative component that allows for more in-depth understanding. By evaluating the experiences of a specific group of students, this study is expected to act as a conduit to increase knowledge about student engagement of at-risk students and help to define beneficial LLC support opportunities clearly.

It is important for postsecondary institutions to assess living learning programs that impact first year students and beyond because they have a potential to affect student postsecondary persistence (Blimling & Schuh, 1981). Postsecondary persistence can lead to attainment of a degree; there is “considerable evidence [that] attests to the vital role educational attainment plays in shaping subsequent occupational, social, and economic status” (Pascarella & Terenzini, 2005, p. 373). Pascarella and Terenzini (2005) explained that more research is needed to look at all students’ college experiences and the aspects that make individual students different in their pursuit of postsecondary persistence and degree attainment.

In particular, the study has the potential to enhance the literature in a deficient area of first generation college students and low income students’ engagement within LLCs. These at-risk students have additional characteristics that bring challenge and hardship into their college experience (Becker et al., 2009). Understanding the resources that influence persistence for these students can help administrators “more effectively facilitate resource development” (Becker et al., 2009, p. 3). The intent of this study is to embark on a path that will lead other postsecondary researchers and administrators to explore and evaluate potential large to small resources that can support increased at-risk student engagement encompassing academic and

social integration, institutional climate, peer collaboration and personal growth, and beneficial LLC support opportunities.

Limitations of the Study

This study is limited by using a sample from only one university's student population. The sample used in this study may not be representative of the national population of student characteristics in LLCs. The characteristics of first generation college students' as defined for this survey may not be representative of the national population of first generation college students (Choy, 2001). All residential colleges at the institution met the criteria to participate in the study. Purposeful sampling limited the researcher's participation size. The researcher is restricted to a regional study because of financial limitations and time constraints. In addition, this study crosses multiple programs but is not longitudinal. Students' standardized test scores for college entry were not taken into consideration for this study. The researcher brings her own biases to the study as a past first generation and low income undergraduate student and believes that LLCs enhance student learning and engagement.

Definition of Terms

Academic Integration—In this study, academic integration is defined by a student's "assimilation" into the postsecondary institution's academic life (Prospero & Vohra-Gupta, 2007, p. 966).

At- Risk College Student—In this study, at-risk college students will be defined as first generation college students and / or a Pelican Promise student.

First Generation College Student—Neither parent of student graduated from a four-year college.

Housing—An area in student affairs that houses students on-campus and provides support and management of LLCs. Another interchangeable word for this term will be Residential Life when referencing a department.

Institutional Climate—In this study, institutional climate refers to the influence institutions have on student learning and learning experiences (Upcraft & Gardner, 1989a).

Living Learning Centers—Is a combination of the Oxford / Cambridge model and the living and learning residential model in its early form. In addition, living learning centers serve as a repository to all other living learning communities (Blimling, 1981).

Living Learning Community (LLC)—In this study, refers to “residence-based programs, [that] involves the adaption of a particular curricular model to include a residential component. A primary goal of residence-based education is the integration of students’ living and academic environments” (Laufgraben, 2005). In addition, the LLC can be managed and implemented by student affairs or housing partnering with an academic unit or college (Laufgraben et al., 2004).

Peer Collaboration—In this study, peer collaboration is defined as practices that encourage cooperation and active learning among students (Chickering & Gamson, 1987).

Pelican Promise—In this study, refers to a low income student whose “family income is less than or equal to 150 percent of the poverty level, eligibility for a federal Pell Grant, status as an entering freshman beginning fall 2007 or after, transfer student, or a continuing student who was an entering freshman or new transfer fall 2007 or after” (University, 2011).

Persistence—In this study, refers to a “student’s postsecondary education continuation behavior that leads to graduation” (Arnold, 1999). A student’s characteristics, skills, and experiences can influence their persistence (Ishler & Upcraft, 2005).

Personal Growth — In this study, refers to Magolda’s (2001) self-authorship. Self-authorship is “the ability to construct our own visions, to make informed decisions in conjunction with coworkers, to act appropriately, and take responsibility for those actions” (Magolda, 2001, p. 14).

Residential College—A type of a living learning community. Students live together in a residence hall and pursue their first year of their academic career. This is the “most structured of the living learning options [that] has an academic faculty, dean, or tutors” (Rowe, 1981, p. 53).

Residential Life—An area in student affairs that houses students on-campus and provides support and management of LLCs. Another interchangeable word for this term will be housing when referencing a department.

Retention—In this study, refers to the enrollment in academic coursework from one year to another until degree fulfillment.

Social Integration—In this study, social integration is defined by a student’s “assimilation” into the postsecondary institution’s social life (Prospero & Vohra-Gupta, 2007, p. 966).

Student Engagement—In this study student engagement will be defined by the National Survey of Student Engagement’s (2011) benchmarks and research by Kuh, Kinzie, Schuh, Whitt, & Associates (2005).

Student Involvement—In this study, refers to “the amount of physical and psychological energy that the student devotes to the academic experience” (Astin, 1999, p. 518).

Student Development—In this study, refers to nurturing the whole student to increase persistence, thus increasing retention.

Student Voice—A survey tool that is used by some higher education institution administrators to manage, administer, and share surveys with other postsecondary institutions.

LITERATURE REVIEW

Introduction

This literature review provides historical context of student affairs and housing, the foundation of living learning communities, fundamental student development theory and research, and information on the research of first year college students and at-risk college students. The research will begin by exploring the history of student affairs and housing and their role in student development and residential colleges. Second, fundamental theories for student involvement and student departure will be introduced. Next, student engagement will be explored through academic and social integration, institutional environment, and peer collaboration and personal growth. Then, first year college students and at-risk college students will be introduced through the literature. Finally, a summary of the literature will be provided. This study's particular fundamental theories and student engagement researchers are being used because of their established research agenda over thirty years or more.

Historical Context

Colonial Colleges and *In Loco Parentis* Beginnings

The history of student affairs in America begins with the colonial colleges and the nature of the faculty and student relationships. Using the Oxford and Cambridge residential college models as a blueprint for student housing, the colonial colleges created dormitories (Brubacher & Rudy, 1997). The Oxford and Cambridge residential college models were collaboratively known as the Oxbridge models (Duke, 1996).

The intent of the Oxbridge models brought the residential college program into “the heart of their educational procedures” (Brubacher & Rudy, 1997, p. 41). This residential college

model of students living on campuses with the ability of interacting with their professors academically and socially was ideal for the colonial colleges (Thelin, 2004). However, financial constraints at American universities and colleges impeded the completion and detail of these dormitories, other academic buildings, and academic common spaces (i.e. quadrangles) that would support the residential college models (Brubacher & Rudy, 1997; Thelin, 2004).

In particular, Duke (1996) explained that Harvard University, the University of Chicago, and Princeton University all made unsuccessful attempts to implement the Oxford and Cambridge residential college models. He also explained that the root of their implementation failure was:

Those who championed the residential college idea in America generally did not base their understanding of the Oxbridge on scholarly or even systematic study of the development of the two universities. Instead they gleaned what was necessary to support their vision from popular notions and personal observations of Oxford and Cambridge, while ignoring or disregarding inconsistencies. (Duke, 1996, p. 7)

Increased enrollment was one of the major reasons these postsecondary American institutions wanted to institute the Oxbridge residential college models. The idea was for large colleges and universities to have engaging experiences with faculty interaction and academic presence (Duke, 1996).

In some colleges and universities, the poor conditions of the student facilities such as the dining halls and dormitories led to student complaints and in some cases rioting, causing tension between students and faculty in the late 1700s through the early 1800s (Brubacher & Rudy, 1997; Thelin, 2004). Frequently, faculty would fine students for misconduct by removing special privileges and interrupting class enrollment or progress (Brubacher & Rudy, 1997). Furthermore Thelin (2004) said:

Despite the glorification of the “collegiate way” as a haven for youth and a harmonious arrangement for learning, it also was a recipe for conflict characterized by student riots and revolts. These outbursts frequently were triggered by what we would call “consumer complaints” about matters ranging from bad food in the dining commons to restrictions on student activities and autonomy. Presidents, assisted by tutors, were constant disciplinarians. Student offenders were subject to a range of punishments. (p. 21)

Brubacher and Rudy (1997) refer to the disciplining of students during early student life as a “paternalistic regime” (p. 51). *In loco parentis*, meaning in the place of parents, was the rationale behind faculty and administrators disciplining college students (Thelin, 2003).

The difficult *in loco parentis* role that faculty had to assume created a contradiction of academic ideology and practicality of education held by faculty and students (Brubacher & Rudy, 1997). The differences stem from faculty choosing “to withdraw from the surrounding world of competitive materialistic activity into an oasis of books and abstract ideas” (Brubacher & Rudy, 1997, p. 121). On the other hand, students “neither understood or sympathized with this type of life and visualized for themselves a ‘practical’ future, the kind which made sense to most American businessmen and men of affairs” (Brubacher & Rudy, 1997, p. 121).

Modernization of Universities and Colleges

Carol S. Gruber (1997) noted that, in the early part of the nineteenth century, “there were serious attempts to reform the American college in conformity with the expansion of knowledge and changing social conditions and needs, but the attempts met with enormous resistance and were brought to an end by the Civil War” (p. 204). Land grant colleges were funded through The Morrill Land Grant Act of 1862 by the federal government. This legislation was intended to “foster access to useful public higher education...[and a source] of affordable, practical higher education offered by state colleges and universities” (Thelin, 2004, p. 75).

The Second Morrill Land Grant Act of 1890 included the funding of Black-land grant colleges (Thelin, 2004). Access to higher education now included women, as they “gradually established their right to attend” (Solomon, 1985, p. 45). Solomon (1985) explained that although male attendance numbers were higher than female numbers, increasing numbers of women gained access to college as “more received preparatory training” (p. 47).

With the increased funding for postsecondary education followed an increasing need and demand to house these students. Previously, colleges and universities could not afford to keep up the maintenance of dormitories and students would stay in off campus upscale housing (Brubacher & Rudy, 1997). Brubacher and Rudy (1997) called this off campus living situation for students that resulted from financial constraints an adapted “laissez faire” policy by colleges and universities to cope with their housing of students (p. 121).

The Morrill land grants helped some states increase the number of colleges and universities by partnering with the federal government and gaining incentives on selling “western lands, with the states being obliged to use the proceeds to fund advanced instructional programs” (Thelin, 2004, p. 76). The land grants allowed some colleges and universities to get back in the business of housing students and build more extravagant dormitories to compete with the off campus housing (Brubacher & Rudy, 1997).

The divide of faculty and student ideology and press coverage made way for the German model of universities that would facilitate the modernization of American colleges and universities between 1870 and 1910 (Gruber, 1997; Thelin, 2003). O’Boyle (1983) said, “Germany's universities exemplified the ideal of pure learning, the disinterested pursuit of truth, knowledge for its own sake” (p. 3); these universities had full-time professors in their faculty

(O'Boyle, 1983). Universities such as Johns Hopkins University, Clark University, and the University of Chicago followed the German model and “contributed to the advancement of cutting edge scholarship” (Thelin, 2003, p. 11).

Recognizing the shift of faculty responsibility away from *in loco parentis*, the President of Harvard University, Charles William Eliot, focused more attention to academic advising programs and developed a curriculum that would craft student affairs (Nuss, 2003). Other universities such as Johns Hopkins University formed a counseling system for students and the President of the University of Chicago showed interest to integrate “total personal development of undergraduates” (Brubacher & Rudy, 1997, p. 334). Increased philosophy of student responsibility birthed honor systems, student councils, and student government organizations on-campus (Nuss, 2003). New student organizations were formed on campuses for example, “robust extracurricular world of athletics, fraternities, sororities, campus newspapers, and clubs” (Thelin, 2003, p. 11).

In 1870, Harvard University established a position that today would be called a dean of a college for academics (Brubacher & Rudy, 1997). In 1890, a board of freshman advisors was created and directly supervised by a dean position of student affairs. The two positions of academic and student affairs deans became a blueprint in universities and colleges across America. These positions began to take many names that included dean of students, dean of men, and dean of women that concerned themselves with student extracurricular activities (Brubacher & Rudy, 1997).

The Rise of Student Affairs

Residential housing was reestablished and expanded from the meager accommodations and funding during the colonial college period (Brubacher & Rudy, 1997). In particular, from 1893 to 1905 Chicago University modeled their housing system from the Oxford and Cambridge residential college housing system that included their own housing personnel, “house committees, a well-equipped student clubhouse” (Brubacher & Rudy, 1997, p. 337), and quadrangles. In some form or fashion by 1939, this trend to remodel residential housing increased in other postsecondary institutions across the nation (Brubacher & Rudy, 1997).

Increasing enrollment led to issues of student problems that could not be resolved efficiently by the dean, therefore creating counseling services (Brubacher & Rudy, 1997). Schroeder, Maple, and Associates (1994) explained that Title IV of the Housing Act supported in meeting the needs of student housing demands which contributed toward monumental construction of student housing facilities in colleges and universities. The main focus of this housing act was to “house and feed students through maximizing the number of beds constructed with available funds” (Schroeder et al., 1994, p. 7).

The increase of student enrollment had major implications institution-wide for faculty and administrators dealing with students. More direct focused student personnel positions were required. Brubacher and Rudy (1997) stated:

By the time of the First World War, the administrative staffs dealing with these problems began to proliferate and diversify. Directors of admissions now came to be appointed, and placement and health officers too. The modern phase of the personnel movement was born. (p. 335)

Brubacher and Rudy (1997) said that psychological needs for testing and counseling at universities and colleges were met after the First World War because of the increase of army psychologists obtaining student personnel positions in student affairs.

The Student Personnel Point of View 1937, 1949, and 1987

Organizations such as the Rockefeller Foundation, the General Education Board, and the American Council on Education focused on the development of the student personnel role (Brubacher & Rudy, 1997). The American Council on Education appointed a committee “to study the practices in colleges and universities” (Brubacher & Rudy, 1997). In 1937, a report called the Student Personnel Point of View (SPPV) was produced from this committee and “shaped the core values of the profession” (Amos et al., 1937; Nuss, 2003, p. 71).

The 1937 SPPV committee recommended that “in addition to instruction and business management adapted to the needs of the individual student, an effective educational program includes one form or another the following services adapted to the specific aims and objectives of each college and university” (Amos et al., 1937, p. 40). This list included 23 student services functions that should be fulfilled by a student affairs’ area in accordance with the academic mission of each postsecondary institution (Nuss, 2003). These student service functions include:

- Providing and supervising an adequate housing program for students
- Supervising, evaluating, and developing the social life and interests of students
- Supervising, evaluating, and developing the extracurricular activities of students
- Assisting the student to clarify his occupational aims and his educational plans in relation to them. (Amos et al., 1937, p. 41)

The effects of the Second World War and the 1944 Servicemen’s Readjustment Act, also known as the GI Bill, caused an influx of students onto the college and university systems (Blimling, 1981; Brubacher & Rudy, 1997; Duke, 1996). In 1949 another meeting for the SPPV

committee convened. This committee added to the previous committee's findings on developing the whole student by stating, "the concept of education is broadened to include attention to the student's well-rounded development — physically, socially, emotionally, and spiritually — as well as intellectually" ("The Student Personnel Point Of View, 1949," 1949, p. 17). The student was bestowed with the role of an active participant in his or her development throughout their college experience (Brubacher & Rudy, 1997).

Establishing a more purposeful housing experience for students was now a goal of additional student services needed for postsecondary universities. Concerning this new goal, Brubacher and Rudy (1997) said "a new concern should be developed with student housing, with a view to establishing that residential system which would best facilitate academic and personal development" (p. 330). Blimling (1981) said that for years "residence halls, and for that matter many areas of student personnel, were staffed with retired military people, discarded football coaches, elderly housemothers, and random others" (p. 6). However, implementing the holistic view of nurturing a student's college experience led to the replacement of mediocre residence hall staff with professional staff having graduate degree credentials (Schroeder et al., 1994). Previously, residence halls were called dormitories.

By 1945, professional organizations formed to enrich the development of "specialized student affairs roles on campus" (Nuss, 2003, p. 71). Housing standards were developed by the first professional student housing association called the Association of College and University Housing Officers – International (Schroeder et al., 1994). In the 1960s and early 1970s students fought to end *in loco parentis* and courts granted students constitutional rights on-campus (Bickel & Lake, 1999). The SPPV committee formed again in 1987, after the end of *in loco*

parentis, the 1954 case of *Brown v. Board of Education of Topeka*, the Civil Rights Movement, the 1964 Civil Rights Act, the 1965 Higher Education Act, and the 1972 Title IX Amendment of the Higher Education Act.

The reformation of the SPPV committee, sponsored by the National Association of Student Personnel Administrators (NASPA), met for the 50th anniversary of the SPPV (Albrigh et al., 1987). In this session they would present the purpose of student affairs as an area that “enhances and supports the academic mission” (Albrigh et al., 1987, pp. 14 - 15). The committee explained student affairs’ ideologies of inclusion for all students, a need of student engagement, a need of student involvement, student personal circumstances affecting learning, out-of-class learning environments, institutional climate, and many more student development ideologies that were conveyed in the report (Albrigh et al., 1987). An example of these purposeful partnerships to increase student development and success are living learning communities (LLCs).

Living Learning Communities Established

The University of California-Santa Cruz made an organized attempt to resurrect the Oxbridge residential college model in the mid-1960s (Duke, 1996). Their plan was to make a large campus of 27,500 students’ educational experience seem smaller by implementing “10 professional schools and 15 to 20 residential colleges, each would encompass residential and dining facilities for 600 undergraduates” (Duke, 1996, p. 144). The university had hopes that other postsecondary universities could follow their model of residential college infrastructure and educational practices as a firm example. Patience with the residential college system grew thin with students and faculty as the years progressed. As the university restructured and

departmentalized faculty and students moved to off campus housing, the residential college system at Santa Cruz began to disband (Duke, 1996).

The focus was then on holistic student educational experiences and purposeful departmental relationships such as student and academic affairs to create collective faculty and student learning outcomes, which in turn generated LLCs in residence halls (Schroeder et al., 1994). After Santa Cruz, “other living learning communities were developed at institutions such as the University of Nebraska, Michigan State University, Stanford University, and others” (Schroeder et al., 1994, p. 9). During this LLC formulation period, student development theories began to materialize and hosts of literature by practitioners and researchers of postsecondary education were written, e.g. Astin, 1975; Blimling & Schuh, 1981; Chickering & Gamson, 1987; Kuh et al., 2002; Pascarella & Terenzini, 1991; Tinto, 1975, 1993; Upcraft & Gardner, 1989a.

The desire to reformulate the Oxbridge model and incorporate it into the living and learning residential model that focuses on developing the whole student gave birth to living learning centers in postsecondary institution’s residence halls. These on-campus living based programs are focused on bringing in-depth experiences in both academic and social development (Pascarella et al., 1994). In addition, Rowe (1981) added that living learning centers should focus on specific programs for postsecondary students that live on-campus, integrate academic and living environment experience, and make their description of the program clear and distinct from other university or college programs. Pascarella, Terenzini, and Blimling (1994) indicated that living learning centers have “significant positive indirect effects on student academic and personal development, mediated by the distinctive social, interpersonal, and cultural living

environments that they shape” (p. 40). The living learning center acts as a repository to all LLCs such as residential colleges (Rowe, 1981).

There are many different definitions of residential colleges and numerous different types of programs that postsecondary administrators and institutions consider residential colleges (Smith, 1994). Rowe (1981) gives an explanation of the definition and details of residential colleges, specifically that residential colleges were:

[The] closest to the Oxford residential model, these mini colleges generally function as degree-granting entities. Students living together pursue all or a significant portion of their academic careers within the residential college too. This most structured of the living learning options has an academic faculty, dean, or tutors. (p. 53)

Residential colleges were defined by Laufgraben et. al (2004) as multi-year living learning programs that may or may not grant degrees and provide faculty interaction through multiple avenues.

Laufgraben (2005) provided an elaborate definition of learning communities in residential halls and characteristics of a residential learning community in later research:

Learning Communities, [in] residence-based programs, involves the adaption of a particular curricular model to include a residential component. A primary goal of residence-based education is the integration of students’ living and academic environments. Educational programming in residence halls centers on the belief that not all learning occurs in the classroom. A significant amount of what students learn during college comes from their experiences of daily living, and there is natural overlap between students’ academic and social learning activities. (p. 380)

Moreover, Laufgraben et al. (2004) also provide another definition in addition to the residential college definition for a residential education program as a one to two-year living learning program managed and implemented by student affairs or housing partnering with an academic unit or college.

Laufgraben (2005) said that learning communities provide first-year students with an “introduction to the academic and social life of an institution” (p. 371). This researcher also explained that learning communities “support first-year students in their academic and social transition to college” (Laufgraben, 2005, p. 386). The researcher also explained that student engagement is made stronger when students participate in learning communities and these students learn from each other in the process. In addition, Inkelas et al. (2007) said that LLCs are not designed to target first generation students, but can be valuable for their academic and social integration.

In a study on learning communities and educational outcomes, researchers found that “an institution must provide a range of high impact activities and an overall educational environment that facilitates student motivation. Our research substantiates that learning community participation should be considered among those high-impact activities” (Beachboard, Beachboard, Li, & Adkison, 2011). In a qualitative study on learning communities and at-risk students, Jehangir (2009) stated, “What learning communities do offer is a way for us to use an intersecting approach to practice a culture of authentic engagement for students and for ourselves as co-learners in the process” (p. 48). Moreover, researchers found in a study on learning community participation and student engagement that learning communities’ environment help to promote “active and collaborative learning and student – faculty relationships” (Pike et al., 2011, p. 314).

Student Affairs Today

Today’s student affairs professionals, researchers, and institutional academicians continue to form partnerships to increase student learning outcomes that lead to student

persistence and success (Nesheim et al., 2007). Researchers today like Pascarella and Terenzini (2005) are concerned with the impact of college on students. In addition to this research, Tinto (1987) argued that academic and social components must be integrated into student learning communities because it is “essential to the full development of the individual” (p. 120). Brubacher and Rudy (1997) voiced that residential life or housing should encompass a system that can support and facilitate both a student’s academic and personal development in a postsecondary environment.

Student affairs continues to concentrate on the development of the whole student through practice, theory, and research initiatives (Pascarella & Terenzini, 2005). Student affairs has evolved from producing bare student services to purposeful student services and partnerships that support the academic mission of postsecondary institutions to increase student development and success (Albrigh et al., 1987). Inkelas et al. (2007) said, “academic and student practitioners should consider ways to encourage the participation of first generation students in L/L [Living Learning] programs” (p. 423).

As a result, LLCs are a product of purposeful student affairs academic and social programming that are offered by many colleges and universities to first year students and beyond. Not only are students beneficiaries of LLCs such as residential colleges, both faculty and staff involved in these programs also gain benefits from their involvement and interaction with students (Smith, 1994).

Fundamental Theories

Student Involvement

Foundational student involvement research by Astin (1975) examined reasons and multiple student characteristics that explain why students drop out of college in a longitudinal and multi-institutional study. These characteristics included race, academic background, family background, educational aspirations, study habits, residential and campus environment, employment, and other characteristics that might be influential to student dropout. Numerous characteristics were found to be influential predictors of college student dropout. In particular, Astin's (1975) multi-institutional 1972 study found that 49 percent of freshman men and 63 percent of freshman women lived on-campus. According to the researcher, living on-campus helped to decrease the freshman student dropout chances by 10 percent. Astin (1975) said, "where students reside while attending college can be directly controlled by policy-makers, administrators, and students. Policy-makers who view living in college residence halls as beneficial can appropriate the funds to improve or expand these facilities" (p. 89). Furthermore, the researcher said that housing administrators can influence the chances of student dropout rate in relation to making housing more or less available to students. Astin (1975) also explained that forcing a student to live on-campus may not emulate the results found in the study of students that choose to live on-campus.

Astin (1975) found a direct link between persistence and academic grade point average. The researcher added that if a student has an active role in the institution's academic campus life, the student will excel in making efforts to succeed academically as compared with those who are not involved academically. The study's findings for social campus life participation were limited

to collegiate sport and fraternity and sorority participation. Nonetheless, Astin (1975) insisted that social involvement decreased dropout chances further supporting involvement theory. Also, Astin (1975) detailed that “these findings support the theory that student persistence to some extent depends on the degree of personal involvement in campus life and environment” (p. 108).

Astin (1999) describes student involvement as “the amount of physical and psychological energy that the student devotes to the academic experience” (p. 518). This researcher said student involvement includes a student actively participating and involved with faculty, peers, time spent on-campus, studying, student organizations, etc. Astin’s (1999) involvement theory includes five basic postulates:

1. Involvement refers to the investment of physical and psychological energy in various objects. The objects may be highly generalized (the student experience) or highly specific (preparing for a chemistry examination).
2. Regardless of its object, involvement occurs along a continuum; that is, different students manifest different degrees of involvement in a given object, and the same student manifests different degrees of involvement in different objects at different times.
3. Involvement has both quantitative and qualitative features. The extent of a student’s involvement in academic work, for instance, can be measured quantitatively (how many hours the student spends studying) and qualitatively (whether the student reviews and comprehends reading assignments or simply stares at the textbook and daydreams).
4. The amount of student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in that program.
5. The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement (p. 519).

Astin (1999) argued that in order for a student to achieve “desired learning and development” outcomes, they must “elicit sufficient student effort and investment of energy” to succeed (p. 522). Given the conditions of this theory, requests are made for educators and administrators to focus on the student’s actions and motivations.

Astin's (1999) involvement theory places emphases on "mechanisms or processes that facilitate student development (the how of student development)" (p. 522). The researcher used his prior college persistence longitudinal study to analyze the involvement theory. In particular, students that live on-campus have more opportunities for student involvement. These students also develop strong institutional social and academic integration as a result of living on-campus. In addition, faculty and student interaction was strongly related to student institutional satisfaction. The study also found that highly academically involved students are less likely to interact with peers.

Student Departure

Tinto (1975) compared a college student's social integration into the college system and college dropout model to how social integration relates to Durkheim's Theory of Suicide. He used this to illustrate the potential effects of the lack of social integration. Tinto (1975) further explained that the lack of social or academic integration with others in college results in the lack of overall college integration; leading to individual decreased or low commitment increasing chances of student dropout.

Tinto (1975) explained that since colleges are made up of both academic and social structures it is necessary to differentiate between a student's academic and social integration. A student can be fully integrated in one of these areas (i.e. academically) and become a dropout because of the lack of integration in the other area (i.e. socially). In addition, equal emphasis should be given to both academic and social integration to decrease student dropout (Tinto, 1975).

In addition to researching the persistence of college students in terms of both academic and social integration, Tinto (1975) has identified other characteristics that must be taken into account when creating a dropout model. In order to create a model for dropouts in college, motivation of academic achievement, educational expectations, and institutional selection must be included. Motivation to achieve academically includes factors such as reasons why students pursue their degree, background information (i.e. race, gender, social status, community of residence, etc.), and career expectations. Tinto (1975) said personal goal commitment in relation to educational expectations is anticipated to be “directly related to persistence in college” (p. 93). Influences of persistence in relation to institutional selection include specific student reasons of university or college selection and the student’s commitment to the institution. The researcher said that both goal and institutional commitment can increase college completion rates. Although an individual can be fully or partially academically and socially integrated, a student can still drop out of college because of low to moderate educational or institutional commitment levels (Tinto, 1975).

Moreover, Tinto (1975) explained that current effects of job market availability and other outside opportunities can be seen as more advantageous than attending college by the student and increase dropout chances as well. The researcher called for further investigation in many areas regarding college student persistence. In particular, the relationship of faculty and students, how the institution intertwines these relationships, and the individual academic and social concerns of the student are all important (Tinto, 1975).

Tinto (1993) later revised his early dropout research and added more detail to problems and solutions to increasing student persistence. The researcher said that college student persistence is critical in the student's first year of college. Tinto (1993) argued,

Persistence in college requires individuals to adjust, both socially and intellectually, to the new and sometimes quite strange world of college. Most persons, even the most able and socially mature, experience some difficulty in making that adjustment. For many, the period of adjustment is brief, the difficulties they encounter relatively minor, but some find it so difficult that they quit. (p. 45)

Tinto (1993) explained that when a student is closely intertwined in the institution's academic and social environment and culture, both institutional commitment and persistence chances increase.

In relation to student academic integration, Tinto (1993) saw faculty interaction with students in and out of the classrooms as gateways to student institutional intellectual perception. The faculty is seen in relation to their commitment with student learning involvement opportunities, student academic growth, and academic work. Student persistence is directly related to involvement with faculty outside of the classroom setting and is "associated with heightened intellectual and social development" (Tinto, 1993, pp. 69-70).

Tinto (1993) noted that in terms of social integration, student peer interaction in on-campus housing is important in regard to persistence, especially on an individual bases; like roommate relationships. On a collective basis, day-to-day formal and informal interactions with peers and peer groups are important for student persistence. Tinto (1993) argued that his "model of persistence is, at its core, a model of educational communities that highlights the critical importance of student engagement or involvement in the learning communities of the college" (Tinto, 1993, p. 132).

Student Engagement

This section of the literature review will explain student engagement as a whole and then explore specific student engagement dimensions encompassing academic and social integration, institutional climate, peer collaboration and personal growth. Kuh, Kinzie, Schuh, Whitt, and Associates (2005) and the National Survey of Student Engagement (NSSE) (2011), identify two “key components” that define student engagement:

1. The amount of time and effort students put into their studies and other activities that lead to the experiences and outcomes that constitute student success.
2. Ways the institution allocates resources and organizes learning opportunities and services to induce students to participate in and benefit from such activities. (p. 9)

These researchers explained that many colleges and universities are putting their resources into learning environments for their students such as academic and leadership programs (Kuh et al., 2005). These aspects of student engagement can facilitate learning through programs such as living learning communities.

In a study of learning communities and student engagement, findings showed that participation in a learning community was related to increased academic efforts, critical thinking, positive faculty student interaction, and active collaborative learning by first year students (Pike et al., 2011). These researchers also discovered that participation in a learning community did not increase student-faculty interactions with first generation college students. The definition of learning community in this study “was derived from students responses to a question about participating in a learning community or some other formal program where groups of students take two or more classes together” (Pike et al., 2011, p. 305). Becker et al. (2009) noted that both first generation and low income students can be intimidated by the institutional academic

and social culture and have difficulty asking someone for assistance with an issue or problem. These students “lack the intergenerational transfer of knowledge about higher education because few or no family members have college experiences to share with them” (Becker et al., 2009, p. 3).

Kuh (2007) wrote a paper on the results of the National Survey of Student Engagement (NSSE), Beginning College Survey of Student Engagement, High School Survey of Student Engagement, and an Indiana University Center for Post-Secondary Research study. Kuh (2007) focused on “student preparation and motivation to succeed in college” (p. 4) but delivered many observations from the data on student engagement. Kuh (2007) concluded, “participating in high-impact activities such as learning communities early in college can launch students on a trajectory of achievement that benefits them both in college and beyond” (p. 7); therefore, increasing student engagement.

Zhao and Kuh (2004) examined the relationship between student success and learning community participation using the NSSE. The NSSE surveys first year and senior postsecondary students annually and uses those data to compile a report called The College Student Report (NSSE, 2011). Kuh (2007) noted “our studies show that students with a learning community experience were substantially more engaged across the board in other educationally effective activities compared with their counterparts who had not participated in such a program” (p. 7). Zhao and Kuh (2004) also found that learning community participation was “uniformly and positively linked with student academic performance, engagement in educationally fruitful activities (such as academic integration, active and collaborative learning, and interaction with

faculty members), gains associated with college attendance, and overall satisfaction with the college experience” (p. 124).

Kuh et al. (2005) said that students not offered opportunities to join LLCs do not experience the benefits of these intervention programs that are comprised of enhanced student learning and increased peer collaboration. The lack of these experiences afforded by participation in a LLC could cause students to leave college early and should provoke administrators to find ways to end this cycle of losing students (Kuh et al., 2005). New ways to increase student engagement are being formed through information technologies. Arend (2004) suggested, “We could take advantage of the convenience of technology to increase student involvement in campus organizations. Easy access to information can prompt students to get out and become involved in campus activities” (pp. 31 – 32).

In an article on enhancing undergraduate student success, Whitt, Kinzie, Schuh, and Kuh (2008) expressed the potential of all institutions to improve undergraduate student success by “commit[ting] to continual innovation and improvement focused on student success” (p. 9). Arend (2004) explained, “[It is] time to update, to take advantage of technology, and to ensure that we are in control of how patterns of engagement are changing on-campus and how those patterns are facilitating learning” (Arend, 2004, p. 32).

Faculty and administrators’ efforts to inform the entire campus community about campus activities, especially nontraditional and off campus students, could have the potential to increase student engagement across the board, thus positively influencing student learning and social and academic participation. Pike et al. (2011) said that “Institutions interested in using learning

communities to enhance engagement and ultimately improve student learning should consider carefully how to structure them to promote specific types of student engagement” (p. 314).

Academic and Social Integration

Tinto’s (1987) model of institutional departure included academic and social integration as components that could enhance a student’s chances to persist successfully through college. Tinto (1987) argued, “the absence of some form of social and intellectual membership in the academic and social communities of the college serves to establish the condition for departure from the institution” (p. 119). He also added that academic and social integration must be used simultaneously and are “essential to the full development of the individual” (Tinto, 1987, p. 120).

Academic integration can be defined by a student’s “assimilation” into the postsecondary institution’s academic life (Prospero & Vohra-Gupta, 2007, p. 966). The academic life can include but is not limited to faculty interaction outside of the classroom, classroom participation, academic support services, and advising. Social integration can be defined by a student’s “assimilation” into the postsecondary institution’s social life (Prospero & Vohra-Gupta, 2007, p. 966). The social life can include but is not limited to student activity, event participation, intimate peer friendships, roommate relationships, and racial tolerance (Prospero & Vohra-Gupta, 2007; Upcraft & Gardner, 1989b).

Tinto (1987) stated that “a particularly intriguing application of the concept of integrated programs for retention can be seen in the creative use of the first year of college as a foundation year of the student college career” (p. 153). Tinto (1987) explained that these first year programs have intellectual and social components that allow students to gain skills that assist with their

persistence through college. In these living and learning programs faculty and students participate in “a range of common experiences, shared experiences...to interact along a range of intellectual and social issues” (Tinto, 1987, p. 153). Tinto’s (1987) research concluded that programs which include an intellectual and social integration component assist in providing students with an advantage to succeed in their future college years. Living learning communities consist of both academic and social programming that have the potential to promote student learning and success (Schroeder et al., 1994). Inkelas et al. (2007) said that researchers and practitioners both in academics and student affairs should encourage first generation college students to participate in living learning programs.

In a study of 1,335 first generation college student’s perception of their academic and social transition from 33 colleges and universities, Inkelas et al. (2007) compared first generation college students in living learning programs with first generation college students not participating in living learning programs. Both groups of these students’ showed perceived ease with their academic transition to college. In this study, students in living learning programs perceived “smooth” academic transition indicators that included interaction with faculty and co-curricular residence hall activities such as peer counselors and hall workshops.

In the same study, Inkelas et al. (2007) reported that students perceived “smooth” social transitions with both first generation living learning program students and those not participating in living learning programs. These social transition indicators included social environment, faculty and peer interaction, residence hall academic and institution campus climate. However, in the overall social and co-curricular environments’ section of the study LLC students perceived more “smooth” transitions in college than their counterparts. The researchers concluded that

living and learning programs are beneficial to ease the academic and social transition of college for first generation students. In addition, they found that living learning programs activate and cultivate “interests and abilities of first generation students” that “contribute to their ultimately successful transition in college” (Inkelas et al., 2007, p. 423). In this study active living learning participants were surveyed. As a result, the researchers’ commented that because these students were yet to complete their program, living learning participation may not be understood fully by students until time has lapsed for reflection. In addition, these researchers called for additional living learning studies to be conducted on at-risk populations like first generation and influential program effects on these students (Inkelas et al., 2007).

Institutional Climate

Institutional climate is also known as institutional environment or campus climate throughout the literature and practice. An institutional climate that positively influences student learning is one that encourages and facilitates diverse learning experiences (Upcraft & Gardner, 1989a). Upcraft and Gardner (1989a) explained that student success is heightened by an institutional environment that encourages faculty-student interactions, promotes peer interaction, offers on-campus housing options, and provides student extracurricular involvement opportunities. Tinto (1993) noted that “institutions and students would be better served if a concern for the education of students, their social and academic growth, were the guiding principle of institutional action” (p. 4). Astin (1999) said that student involvement theory can be used by researchers, college administrators, and faculty to guide their research of student development theory in creating effective learning environments.

Student learning can be impacted in numerous ways such as through student engagement programs and diverse learning experiences that should be encouraged by administrators (Kuh, 1994). Student learning experiences allow students to experience ideologies of other students, faculty, staff, and administrators that are of a different race, gender, socioeconomic status, sexual orientation, or other categories than themselves. Pike and Kuh (2006) stated:

Learning to function effectively in a diverse society also depends on the types of diversity experiences a student has and the commitment of institutional leaders to creating the conditions needed for positive and productive interactions among diverse groups of students, faculty, and staff. (p. 445)

In a study of first year college students, Reason, Terenzini, and Domingo (2007) found that students' perceptions of the supportiveness of their institution's environment included "the emphasis their institution placed on student encounters with diverse people and ideas, as well as how often students had such encounters" (p. 294).

Researchers Li, Sheely, and Whalen (2005) conducted a study on the retention rate of students living in residence halls and the reasons students chose to live on or off campus. This study consisted of students living on-campus at a four-year university with a sample size of 5,747 students. The students were sent a web-based survey in October 2003 and 2,553 students responded. The results revealed that some of the most important positive predictors of why students choose to live on-campus are "learning community membership, academic support, and leadership opportunities" (Li et al., 2005, p. 30). Li et al. (2005) recommended to housing administrators based on the results of their study that:

[They] should actively pursue ways to foster an environment that provides more leadership opportunities and academic support. Organizing a sound social and academic environment and encouraging positive interactions among residents will yield more cognitive and intellectual development in the residence halls. (p. 35)

Li et al. (2005) said that housing administrators should provide spaces in the residence halls for students to “study and discuss academic issues together” (p. 35). Magolda (2004) argued that “fostering student learning in all its complexity requires integration of all domains of learning and involvement of all educators regardless of their campus role” (p. 245).

Peer Collaboration and Personal Growth

Cross (1998) defined learning communities as “groups of people engaged in intellectual interaction for the purpose of learning” (p. 4). Cross (1998) stated that “students work together cooperatively to find the best or “correct answer” (p. 5). In addition Cross (1998) explained, group work is “advantageous” and “necessary” (p. 5) for students to learn interdependently. Furthermore, this researcher argued that “small interactive peer-group learning is more likely than a lecture or a textbook to make the connections that students need to develop a more complex schema, offering more links to accommodate new learning” (Cross, 1998, p. 9). Cross (1998) said that when learning communities encompass peer-group learning and other learning aspects to engage students, “valuable contributions [are made] to education” (p. 9).

In a study on learning communities and student engagement, Pike et al. (2011) found that in general “learning community participation also appears to be effective in promoting student interaction with diverse peers” (p. 314). Chickering and Gamson (1987) created Seven Principles for Good Practice in Undergraduate Education. Two of the seven good practices listed for higher education encourage peer group work resulting in peer collaboration among students. The two practices are as follows:

1. Good Practice Encourages Cooperation Among Students – Learning is enhanced when it is more like a team effort than a solo race. Good learning, like good work, is collaborative and social, not competitive and isolated. Working with others often

increases involvement in learning. Sharing one's own ideas and responding to others' reactions improves thinking and deepens understanding.

2. Good Practice Encourages Active Learning – Learning is not a spectator sport. Students do not learn much just sitting in classes listening to teachers, memorizing pre-packaged assignments, and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves (Chickering & Gamson, 1987, pp. 2 - 3).

Chickering & Gamson (1987) advocated that their seven good practices come from over 50 years of researchers studying teaching practices and student learning. Inkelas et al. (2007) generalized that for the entire college student population, peer relationships and peer culture can influence successful collegiate transitions such as academic success through peer interaction (i.e. through peer study groups).

In a national study of 39 institutions' engineering programs, Strauss and Terenzini (2007) focused their research efforts on examining individual students in and out of classroom experiences and group collaboration abilities. Strauss and Terenzini's (2007) findings indicated that "both students' academic and out-of-class experiences make statistically significant and unique contributions to student learning" (p. 988). In their findings, Strauss and Terenzini (2007) stated:

Although these particular activities were studied in settings specific to engineering, they suggest that students in other fields might well benefit from such out-of-class opportunities to take what is learned in the classroom and to apply it in practical settings through such emerging pedagogies as service learning...Such opportunities both extend and reinforce what may otherwise be an abstract, theoretical experience in a classroom. (p. 989)

Additionally, this study provides perspective relevant to other academic disciplines because the "criterion variables and conceptual underpinnings are also relevant to studies of teaching and learning" (Strauss & Terenzini, 2007, p. 988).

Magolda (2001) said that self-authorship is “the ability to construct our own visions, to make informed decisions in conjunction with coworkers, to act appropriately, and take responsibility for those actions” (p. 14). Students should be trained to formulate a “sense of self” to make “complex professional decisions” (Magolda, 2003, p. 235). Brown (2004) said that “self-authorship as a key aspect of contextual knowing, [it is]the highest level of epistemological development where an individual integrates one’s own and others’ ideas, and evaluates knowledge claims in light of a particular context or circumstance” (Brown, 2004, p. 142).

Magolda (2001) explained that college students believe adult workers have to master being self-initiating, self-evaluating, responsible for actions, and other matters to be successful in professional positions. Moreover, Magolda (2003) explained:

Given the complexity of college and adult life, educators must transform higher education to better help students manage this complexity. Many educators read developmental theory as indicating that maturity does not and cannot occur before adulthood. Yet theory is generally a depiction of the outcome of a particular set of experiences. Delay in developing an internal sense of self is a result of social and educational environments that reward reliance on authority rather than a sign that it cannot happen until one’s 20s. Evidence suggests that college students can operate at more complex levels of development than educators typically see if the context supports this more complex functioning. (p. 236)

Magolda (2003) identified contextual examples such as student residential housing, academic advising, faculty collaboration, and student affairs’ programs that can be used as conduits to facilitate these experiences. The researcher gave an example that students can exercise self-authorship by living in on-campus student housing and by participating in the student community to create policies for the community members that are “within the confines of state law and university policy” (Magolda, 2003, p. 240).

First Year College Students

Upcraft and Gardner (1989a) connected freshman success with the fulfillment of first year students' academic and personal goals. They listed six goals for freshmen in college: developing skills to be successful academically, creating and maintaining relationships, developing their identity, choosing a career path, maintaining a healthy mental health and wellness, and enhancing their evolving ideology or belief system (Upcraft & Gardner, 1989a). Jennifer L. Crissman Ishler (2005) described the profile of first year students as ever changing and included many diverse characteristics. These characteristics include the age of students, which is not traditional in a sense that some students do not attend college directly from high school (Ishler, 2005).

The racial and gender makeup of the university has diversified over time with women and African Americans now attending postsecondary institutions more than in the past when they were restricted (Brubacher & Rudy, 1997; Ishler, 2005; Solomon, 1985). There are also increasing populations of Asian and Latino students gaining access to postsecondary education. Also, there is an increase of students having part-time enrollment rather than being traditional full-time enrolled students (Choy, 2001).

Universities and colleges now have more first generation students (Ishler, 2005). These families tend to have lower incomes of those students whose parents did attend college and these students tend to receive less monies from their household to support them in college (Choy, 2001). Family background has been changed from both parents being traditionally in the home; single-parent homes are now a factor. Ishler (2005) explained that since first year student characteristics are ever-changing, "this information should be widely distributed each year to

faculty, staff, and policy makers so that decisions, policies, and practice, both inside and outside the classroom, are based on the true demographics and characteristics of entering students” (p. 26).

At-Risk College Students

First Generation Students

Pascarella, Pierson, Wolniak, and Terenzini (2004) examined first generation students’ college experiences and outcomes. They found that first generation students are more academically and socially underequipped for college than students with college educated parents. In relation to first generation college students Stuber (2011) stated that:

Although differences in rates of persistence between first- and second-generation college students are statistically significant and cause for concern, the majority [of first generation] do persist. Thus, while higher education researchers should continue to explore the problem of school-leaving, and administrators ought to continue to look for policy options that might mitigate this problem, the heavy emphasis on attrition masks the extent to which such students continue to be present on college campuses. By shifting the focus to those who remain on campus, more can be done to help them succeed socially and academically. (p. 117)

Moreover, Pascarella et al. (2004) explained that first-generation college students might be able to compensate for this deficiency with strong academic and social engagement.

In Astin’s (1975, 1999) research on involvement, he found that living on-campus “was positively related to retention, and this positive effect occurred in all types of institutions and among all types of students regardless of sex, race, ability, or family background” (1999, p. 523). Furthermore, these students living on-campus also have extra time to spend on involvement which can increase their chances of persistence (Astin, 1975, 1999).

Traditional students have an advantage in that family mentors are likely to share institutional knowledge on the interworking of college compared to first generation students (Collier & Morgan, 2008). In their study of both first generation college students and traditional students of faculty expectations, these researchers found that:

First-generation students typically possess relatively lower levels of college student expertise, in that, they cannot rely on parental advice to help them identify and resolve role-based problems or to help them understand the university's expectations. They come to the university with less understanding of student roles and less capacity to build their existing knowledge into genuine expertise. (Collier & Morgan, 2008, p. 442)

In regard to first generation college and first year students, Stieha (2010) encouraged researchers and practitioners to listen to students as they talk about their college experiences to understand practices in higher education that involve students.

Low Income Students

In a study by the National Center for Education Statistics (2002), the results revealed that “low-income dependent students had lower completion rates than high-income dependent students” (p. 27). The detail of the study also specifically illustrated:

Among dependent students who began postsecondary education in 1995–96, attrition without a degree was higher among low-income students (whose parents' income was less than \$25,000 in 1994) than among high-income students (whose parents' income was \$70,000 or more in 1994). Among low-income dependent beginners, 35 percent had not attained a degree and were no longer enrolled in June of 2001, compared with 20 percent of high-income dependent beginners. (Statistics, 2002)

Engstrom and Tinto (2008) argued that institutions must find ways to retain their low-income students that in many times are academically under-prepared. The researchers said that these low income students who participated in a learning community were more academically and socially engaged. Engstrom and Tinto (2008) said:

We found that academically under-prepared students in the learning communities were significantly more engaged in a variety of activities than similar students on their campuses, including in classroom work and in activities involving their faculty and classmates in and outside of class...At the same time, they perceived themselves as having experienced significantly more encouragement, support, and intellectual gain than did similar students not enrolled in those programs. (p. 47)

These researchers also acknowledged that these low income students attributed their LLC environment to their motivation and commitment to academics, feeling of belonging and confidence because of peer collaboration opportunities, and overall LLC active participation.

As a qualitative follow up to this study, Jehangir (2009) used the voices of low income and first generation college students to explore student persistence. When examining the development of a learning community Jehangir (2009) found that these students must have a voice in developing the learning community. In addition, these environments must “allow students to cultivate a sense of belonging and voice in the academy” (Jehangir, 2009, p. 48).

Engberg and Allen (2011) stated, “Given that 38% of low-income students do not attend any postsecondary institution, more efforts are needed to prevent the further erosion of lost talent and curtail the enduring cycle of social inequality that has characterized American society for centuries” (p. 804). Jim C. Eck, Hoyt Edge, and Katherine Stephenson (2007) explained, “higher education research consistently finds that student attrition is caused by a lack of academic and social engagement. Many colleges and universities are now experimenting with living-learning communities in one form or another in order to enhance student-college fit” (p. 1).

Becker et al. (2009) generalized that most low income students are first generation students. Most students that are both first generation and low income have an increased chance of dropout and are more likely to obtain certificates or associates degrees instead of pursuing a 4-year college degree. These researchers explained that both groups can also be intimidated by the

institutional academic and social culture and have difficulty asking someone for assistance with an issue or problem. Both first generation and low income students “lack the intergenerational transfer of knowledge about higher education because few or no family members have college experiences to share with them” (Becker et al., 2009, p. 3). Moreover, Jehangir (2009) explained that these students find that navigating college is difficult and confusing because of hidden rules and expectations from the academy.

Summary of the Literature Review

The general themes that were pervasive in the literature review included:

- Living learning communities are purposeful programs that necessitate constant faculty and student interaction, peer collaboration, personal growth, student effort and commitment, and shared institutional academic and social culture
- Academic and social integration with active student involvement are essential to successful college student engagement
- Student engagement reflects positively on students’ academic and social experiences
- LLCs assist students in achieving academic and social success
- Students have enhanced learning through peer collaboration and faculty interaction
- Institutional climate is an important factor that influences student engagement
- First generation and low income college students have a need for additional academic and social support

Lacking from these themes was detailed information about at-risk students’ perceptions of student engagement in the areas of academic and social integration, LLC influence on institutional climate, and peer collaboration and personal growth. There is scarce quantitative and qualitative research that specifically studied the discussed at-risk students’ perception of their academic and social integration, institutional climate, peer collaboration and personal growth, and beneficial LLC support opportunities. These gaps in the literature provided the

rationale for exploring the discussed at-risk students' perceptions of their engagement encompassing academic and social integration, institutional climate, peer collaboration and personal growth, and beneficial LLC support opportunities.

RESEARCH METHODOLOGY

Research Design

This study of at-risk students' perceptions of their engagement encompassed academic and social integration, institutional climate, peer collaboration and personal growth, and beneficial support opportunities in living learning communities. A mixed methods approach (Creswell, 2003) with a multiple case design (Yin, 2009) was implemented. A sequential explanatory mixed method design (Creswell, 2003) contains a quantitative phase which for this research consisted of administering online student surveys followed by a qualitative phase during which interviews were conducted. The purpose of sequential explanatory strategy is to “use qualitative results to assist in explaining and interpreting the findings of a primarily quantitative study” (Creswell, 2003, p. 215). In the multiple case design (Yin, 2009), the units of analysis in this study were eight living learning communities (LLCs). The study was retrospective in nature given that sophomore students were asked about their first year experiences and opportunities.

The study was conducted at a research intensive university located in the southern part of the United States. A variety of housing living spaces for students desiring to live on-campus is offered by the university. This study focused on the students living in LLCs. The quantitative phase addressed all of the following research questions while the qualitative phase focused on the first two research questions.

- RQ1: How does participating in a living learning community affect first year at-risk students' engagement dimensions of:
 - ❖ Academic integration
 - ❖ Social integration
 - ❖ Institutional climate
 - ❖ Peer collaboration and Personal growth

- RQ2: What living learning community support opportunities are perceived as most beneficial in supporting the development of at-risk first year students?
- RQ3: Does at-risk students' participation in a living learning community result in greater student engagement compared to students not participating in a living learning community?
- RQ4: Is there a difference in student engagement with at-risk students participating in discipline specific living learning communities compared to non-discipline specific living learning communities?

The quantitative component of the study incorporated two dichotomous independent variables, residence hall environment (LLC or traditional residence hall (TRH)), and type of LLC (discipline specific LLC or non-discipline specific LLC), and multiple dependent variables (academic integration, social integration, institutional climate, and peer collaboration and personal growth). Student Voice, an online survey development system, was used as a tool to create, manage, and administer the survey. Responses from the survey were used to focus the qualitative portion of the study. Individual and focus group interviews were conducted to gather more in-depth information from participants.

Sampling

There were two phases of sampling. In the first phase, the LLCs cases were selected. In the second phase, the LLC participants were selected. Students' responses were not biased because they did not have knowledge that the study included their at-risk characteristic(s).

Selection of Cases

Eight LLCs are formally identified by the university. The type of LLC is categorized as discipline specific or non-discipline specific. This category defines whether the LLC program is

geared towards a specific subject matter / college major or general subject matter / any college major. The sampling units included eight LLCs: Agriculture Residential College, Business Residential College, Engineering Residential College, General Residential College, Honors House LLC, Information Technology Residential College, Mass Communication Residential College, and Science Residential College. First year students that met the study's criterion (first generation college student and / or low income student) were selected from the eight LLCs. From within the population of the university's LLCs, a sample was selected based on the following criteria:

- LLC is two years or older
- LLC has designated faculty and student collaboration spaces such as study rooms, smart classrooms, meeting rooms, computer labs, etc.

All of the existing eight LLCs met the criteria to be included in the study. Three of the eight LLCs have established a minimum standardized test score for admission. Selected first-year students in these LLCs that met sample criterion were used in the study.

Approximately 258 first-year students share a residence hall where 118 of these students participate in the Agriculture Residential College. This program is discipline specific for agriculture majors only. This residential college does not require a minimum standardized testing score for participation (Life, 2010a).

The Business Residential College has approximately 150 first-year students that live in a residence hall. This program is discipline specific for business majors only. This residential college does not require a minimum standardized testing score for participation, and students must be admitted to the College of Business to participate in this program. This program helps to introduce students to business culture (Life, 2010b).

The Engineering Residential College has approximately 200 first-year students that live in a residence hall. This program is discipline specific for engineering majors only. This residential college does require a minimum standardized testing score for participation, and students must be admitted to the College of Engineering to participate in this program (Life, 2010c).

The General Residential College has approximately 350 first-year students that live in a residence hall. This is a non-discipline specific LLC and caters to the first year student. General Residential College was the first residential college established at the university. If a student is admitted into the university then they can participate in this program (Life, 2010d).

The Honors House LLC has approximately 323 students that live in a residence hall. This LLC is the eldest program and it is both multi-year and non-discipline specific. Students can participate in this program from their freshman to senior year. The Honors House students have a minimum standardized testing score requirement and must be admitted into the Honors College to participate in this LLC (Life, 2010f).

The Information Technology Residential College has approximately 153 first-year students that live in a residence hall. This program also caters to only freshman students and is non-discipline specific. Although this program is non-discipline specific, technology is incorporated into courses, events, and programs to teach students technology skills. If a student is admitted into the university then they can participate in this program (Life, 2010e).

The Mass Communication Residential College has approximately 98 first-year students that live in a residence hall. This program is discipline specific for mass communication majors

only. This residential college does not require a minimum standardized testing score for participation (Life, 2010g).

The Science Residential College has approximately 200 first-year students that live in a residence hall. This program is discipline specific for science majors only. This residential college does require a minimum standardized testing score for participation and students must be admitted to the College of Science to participate in this program (Life, 2010h).

Selection of Participants within Cases

From each of the designated LLCs, the participant census sample was selected (Creswell, 2003). The participant sample for the study included students within the LLCs that met the at-risk criteria established by the researcher. The participant sample consisted of a fall 2010 cohort of the following students that met one or more of the criteria: first-generation college student and / or low-income. This study defines a first generation college student as having neither parent graduate from a four-year college. For the 2010-2011 fall / spring semesters there were a total of 175 first generation college students across all eight residential colleges that are in the study. The researcher selected the low-income sample from a program called Pelican Promise that is offered through the university. This university program requires the student to meet the criteria of a current resident of the state with a “family income less than or equal to 150 percent of the poverty level, eligibility for a federal Pell Grant, status as an entering freshman beginning fall 2007 or after, transfer student, or a continuing student who was an entering freshman or new transfer fall 2007 or after” (University, 2011). A total of 39 Pelican Promise grant recipients were enrolled for the 2010-2011 fall and spring semesters. There were 25 students who met both

criteria in that they are both a first generation college student and Pelican Promise grant recipient, resulting in a total sample that consisted of 239 at-risk students.

The institution of this study's focus does not provide longitudinal or current student engagement, retention, or persistence information at this present time on first generation college students or low income students. However, overall public retention information is available for all university students. University retention of first year students returning to their second year of school was 84.1 percent in fall of 2009 and 83.8 percent in fall of 2010 (Planning, 2011). Rohli (2010) assessed that 87 percent of non-honors residential college students and 93.3 percent of honors LLC students returned to their second year of school in fall of 2009. Rohli (2010) listed general academic benefit assessment measures for LLC students resulting in these students "see[ing] more value in personal development and connecting classwork to out-of-class learning than their peers living on campus" (p. 25).

Data Collection

Quantitative Data Collection

Two surveys were administered to at-risk students. These surveys were administered simultaneously to two different at-risk student samples: former LLC and traditional residence hall (TRH) students. At the time the study was conducted the participants were in their sophomore year. Both samples of students met one or more of the criteria: first-generation college student and / or low-income student. The students were given a monetary incentive to participate in that they would be entered into a drawing for a cash card if they completed the survey.

During the first three weeks of the LLC survey, three reminder emails were sent. A total of 49 surveys were completed. During weeks four through nine, a few surveys were completed after two more reminder emails. In a final effort to collect surveys, one last reminder email was sent in week 10 to students, resulting in the accumulation of 21 additional completed surveys. Out of the 239 LLC students that were asked to complete the survey, 79 students (33 percent) responded.

During the first three weeks of the TRH survey, three reminder emails were sent. A total of 31 surveys were completed. During weeks four through nine, 18 surveys were completed after two more reminder emails. In a final effort to collect surveys, one last reminder email was sent in week 10 to students, resulting in the accumulation of 11 additional completed surveys. Out of the 151 TRH students that were asked to complete the survey, 50 students (33 percent) responded.

Instrumentation

A combination of surveys that were administered at other higher education institutions through a student survey tool called Student Voice (2011) was used. Through Student Voice's shared community resource center, available surveys are shared by institutions for other institutional researchers to use all or parts of the surveys (Voice, 2011). To verify survey usage, Matthew J. Stuczynski at Student Voice was emailed by the researcher for student survey permission information (See Appendix A).

The researcher used items from a combination of surveys from three higher education institutions. Additional researcher formulated questions were developed to make a comprehensive LLC survey for the purposes of this inquiry. The surveys from the following

institutions were originally administered at various times with different survey purposes. Table 1 lists the survey institution, survey's purpose, survey administration date, and associated questions selected from the institution's survey to administer in this study:

Table 1: Institution Survey Purpose, Dates Administered, and Related Survey Questions

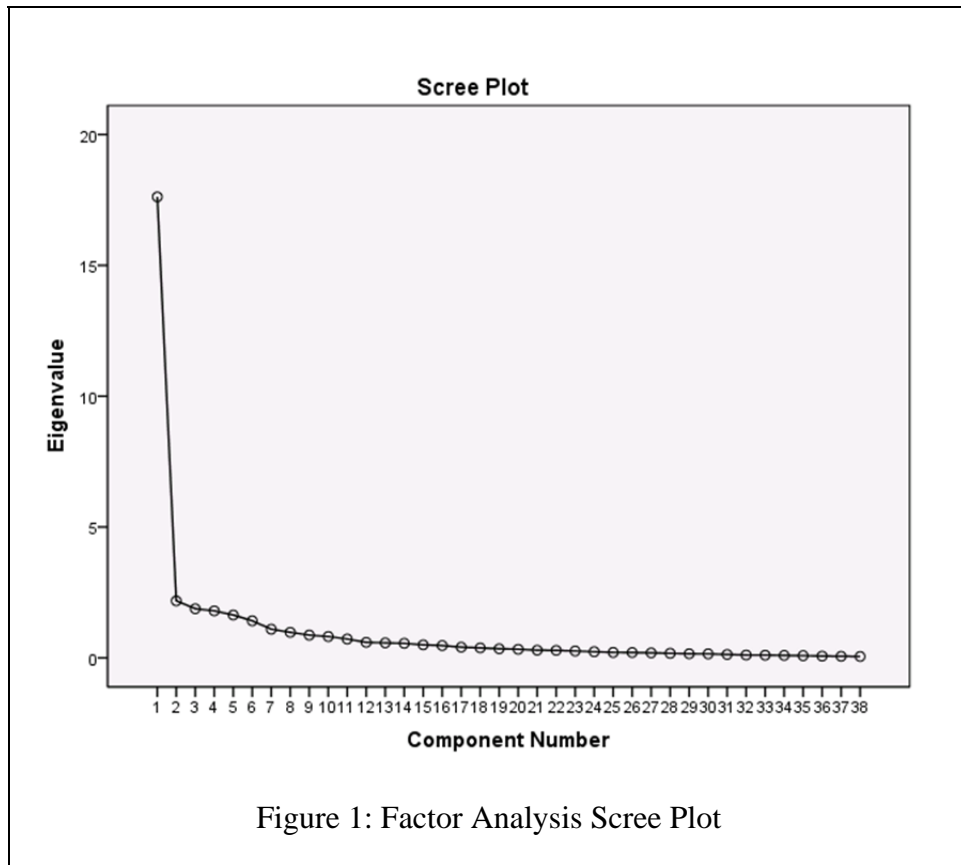
Institution	Survey Purpose	Date Institution Administered Survey	Related Survey Question
Hofstra University	"The purpose of this assessment was to gather information from current sophomore students about their experience to date as a sophomore as well as how their second year compared to their first year. Topics include academic preparation, campus involvement, peer relationships, and the use of and satisfaction with campus services and resources. Additionally there are some questions pertaining to confidence in choice of major as well as future plans" (Hofstra, 2011).	October 1, 2008	9-15, 36-40, 41-48, 50-52, 54
The Catholic University of America	"This survey assesses students' experience in their living/learning community including participation, academic performance, and overall satisfaction" (America, 2011).	September 20, 2010	16-19
The University of Maine	"This survey was designed to evaluate the needs of sophomore students so that specific programming could be developed" (Maine, 2011).	November 3, 2009	1, 2, 5-8, 20-21, 25, 27, 30

All other survey questions not included in Table 1 were developed by the researcher. A duplicate of this LLC survey was administered to TRH students—those who live on-campus and do not participate in a LLC. The surveys can be viewed in Appendix B for LLC participants and Appendix C for TRH students.

The researcher conducted a factor analysis of the survey instrument to establish construct validity. A factor analysis is used as a “statistical technique that reduces a large number of interrelated questions to a smaller number of underlying common factors or domains that are primarily responsible for covariation in the data” (Cappelleri, Kourides, Gerber, & Gelfand, 2000, p. 1800). The pilot study population consisted of undergraduate students in their third year that would have participated in LLCs in the year of 2009.

The survey was administered to the entire population of 1502 LLC students on October 7, 2011 and concluded October 19, 2011. The survey was completely confidential in that no demographic information was collected or analyzed from this population. The data collected were strictly used only for factor analysis purposes. From the 123 respondents only 92 students completed the survey to its entirety. The survey questions selected for the factor analysis were 38 ordinal scale questions out of the 62 total survey questions. All 38 questions had scales that ranged from 1 to 5. Ordinal scale questions were selected to establish the correct clustering for the study’s quantitative analysis.

The factor analysis results’ scree plot revealed seven factors in the component matrix that had eigenvalues of 1 or greater in figure 1. The first factor had an eigenvalue of 17.618.



The researcher chose a five-factor solution by retaining five factors that displayed the highest percentages of the variance.

The rotated matrix illustrates the component's survey questions' correlations to better understand the dynamics, naming of the factors, and illustrate how the variables cluster together (Cappelleri et al., 2000; Pallant, 2010). An orthogonal rotation approach was used to assume that there was no correlation between the factors. The rotated matrix indicated that four questions were too closely correlated across several components. Two of those questions were reworded and inserted back into the instrument because the researcher deemed these questions applicable to the scope of the study. The two remaining questions were removed from the instrument.

Questions contained in Factors 6 and 7 were also removed from the survey because they were redundant questions. The five component factors (Table 2) were named: Factor 1–peer collaboration and personal growth, Factor 2–academic integration, Factor 3–institutional climate, and Factor 4–social integration. Factors 5 was combined with Factor 2–academic integration because all three questions specifically asked about time studying, preparing for class, and academic requirements and were determined to be closer aligned with the intent of Factor 2. Table 2 illustrates the 5 factors, their associated variance percentages, and number of questions within the component:

Table 2: Factor Variance Percentages and Number of Questions Within Factor

Factor	Variance Percentage	Number of Questions
Factor 1 Peer Collaboration and Personal Growth	46.364	7
Factor 2 Academic Integration	5.735	6
Factor 3 Institutional Climate	4.940	6
Factor 4 Social Integration	4.728	7
Factor 5 Academic Integration	4.309	3

As a result, Table 3 illustrates the survey questions that correspond to the following student engagement dimensions:

Table 3: Student Engagement Dimension and Related Survey Questions

Student Engagement Dimension	Survey Questions
Academic Integration	9, 10, 11, 20, 21, 22, 23, 37, 44, 51, 54
Social Integration	13, 14, 15, 16, 17, 24, 39, 50
Institutional Climate	12, 18, 19, 36, 38, 47, 49
Peer Collaboration and Personal Growth	40, 41, 42, 43, 45, 46, 48

The survey questions that were used to evaluate academic integration included Questions 9 thru 11—the influence residential college had on academic performance, academic requirements, and amount of time spent preparing for class / studying. For this same area, Questions 20 thru 23 asked students how connections with faculty, connections with peers in residential college classes, advising with residential college rector, and study groups with fellow residential college students contributed to a better experience in their sophomore year. Next, Question 37 asked about the impact of their opportunity to connect with faculty. Then Question 44 asked if their residential college helped them to experience change in the knowledge of their anticipated major. Question 51 asked the student to indicate how prepared they were for their sophomore year because of the residential college experience. Finally, Question 54 asked how confident the student was that he / she would graduate with his / her current major.

The social integration survey questions included Questions 13 thru 15 that asked how student’s residential college experience contributed to the level of support and care shown by the university, participation in residential college community program and events, and participation in university student organizations and extracurricular activities. Questions 16 and 17 asked students to indicate the degree to which they were actively involved with the residential college

and had opportunities to be involved with community decision making. Then Question 24 asked if their participation in university student organizations and extracurricular activities contributed to a better sophomore experience. In Question 39, students were asked the influence of their residential college experience being impactful on participation in university student organizations and extracurricular activities. Lastly in Question 50, students were asked about their level of satisfaction with their university experience.

The institutional climate included Question 12 to indicate the contribution that the residential college had on student's feeling of belonging at the university. Questions 18 and 19 had students list their level of agreement with statements about being comfortable studying in their residential college and discussing classes with others in their residential college. Questions 36 and 38 asked the impact of the student's residential college experience being impactful on having good friends at the university and connections with peers in class. Then, Question 47 asked if their residential college helped them to experience change in socializing with peers. Last in this area, Question 49 asked about satisfaction with the first year residential college experience.

Peer collaboration and personal growth included Question 40 about the impact of the student's residential college experience on the ability to manage academic responsibilities and activities. In Questions 41 thru 43, 45, 46, and 48 students were asked if their residential college helped them to experience change in emotional maturity, personal growth, leadership skills, sense of life goals, study habits, and participation in student organizations and extracurricular activities in general, respectively.

Qualitative Data Collection

The qualitative sampling strategy for the focus groups used criterion sampling (Miles & Huberman, 1994) by selecting participants from the eight LLCs that participated in the LLC survey from the three areas of first generation only, low income only, and both first generation and low income. The qualitative data collection was completed through individual interviews, focus groups, and written correspondence. The interview protocol for the qualitative phase of the study included:

1. What academic activities in your residential college did you participate in? Why?
2. What social activities in your residential college did you participate in? Why?
3. Describe how you interacted with faculty in your residential college.
4. What residential college activities were faculty involved in?
5. How did your residential college help you to do better in your coursework?
6. Describe how you interacted with peers in your residential college.
7. How did participating in a residential college affect your participation in campus organizations and extracurricular activities?
8. How has your residential college experience helped you to grow as person?
9. What would you tell a friend about your residential college if they were interested in the possibility of living there?

The interviews were conducted during a two-week time period. After checking all 70 students' class schedules, invitations to participate in the focus groups were distributed via email only to the at-risk students that participated in the LLC survey. Students were non-responsive to the initial email. A second reminder email followed up by personal messages detailing focus group information was sent to students that lived on-campus. In some instances, the researcher was able to speak with the students and deliver the reminder messages in-person. Students were

asked to confirm their participation by completing an online form that asked for their name, email address, and residential college. Students were sent reminder emails before each focus group using this collected information.

The researcher conducted four focus groups that consisted of two groups of two students and two groups of three students. The four focus groups consisted of the following combination of residential colleges: Focus Group 1–Honors House, Focus Group 2–General Residential College, Focus Group 3–Business and Engineering Residential College, Focus Group–4 Agriculture, Mass Communication, and Science Residential Colleges. A light lunch was provided for Focus Group 1 because the time of the interview was during lunch. The other focus groups were provided with snacks and drinks because the times of the interviews were late afternoon. Focus groups were conducted in a conference room and an office on-campus that was convenient to students.

In addition, individual interviews were conducted with five students that could not attend their designated focus groups but wanted to participate in the study. Individual interviews were conducted with two Information Technology Residential College students, one General Residential College student, one Business Residential College student, and one Science Residential College student. These interviews were conducted in an on-campus office in a neutral university location and was convenient to students. Overall a total of 15 LLC students were interviewed in the qualitative data collection process.

Four written communications via email were received from students that could not participate in any of the focus groups or individual interviews: three Honors House LLC students and one Science Residential College student. These students answered the nine qualitative

questions listed earlier in this section. The qualitative interviews were recorded, transcribed, and coded by category using Atlas.TI (2011) coding software, and then analyzed by the researcher.

Validity and Credibility

Method triangulation of quantitative and qualitative collection strategies was utilized to increase validity. Factor analysis procedure of the quantitative survey instrument established construct validity. Content validity was established through the examination of the instrument by experts in the field of assessment in Higher Education.

To increase reliability and understanding of questions, the researcher interviewed all participants. Two other coders reviewed sections of transcripts to establish consensus for coding.

RESEARCH FINDINGS

The purpose of this study was to investigate the perceptions held by at-risk students about their engagement in living learning communities (LLCs) and traditional residence halls (TRH) at the university. To complete this research study, a mixed methods approach with a multiple case design (Yin, 2009) was used. The sequential explanatory mixed method design (Creswell, 2003) was implemented by first administering online surveys to at-risk students living in LLCs and TRHs. The administration of surveys was followed up with focus groups and individual interviews with LLC students and was conducted to enhance the quantitative survey results. This section will be organized by research questions. The contents of this section include demographic information, qualitative procedures, and research question results. See Appendix F for a demographic information summary for LLCs and TRHs.

Demographics of Living Learning Community Students

The LLC survey was administered to 239 at-risk sophomore students that were former LLC participants in the academic year fall 2010 and spring 2011. The survey was administered over a 10-week period. Figure 2 shows LLC survey response rate over time:

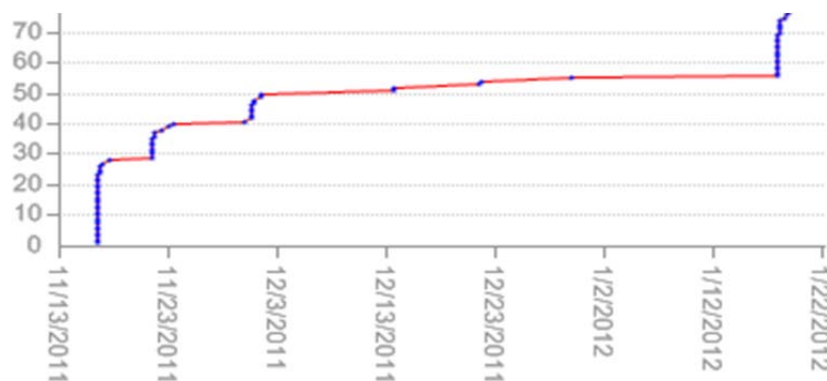


Figure 2: LLC Survey Participant Response Rate Over Time

Of the 239 LLC students that were sent the survey, 79 students responded and 70 surveys were totally complete. Nine surveys were incomplete and were not placed into the quantitative analysis. The response rate for completed LLC student surveys was 29 percent. The 70 participants that completed the survey were in the following LLCs listed in Table 4:

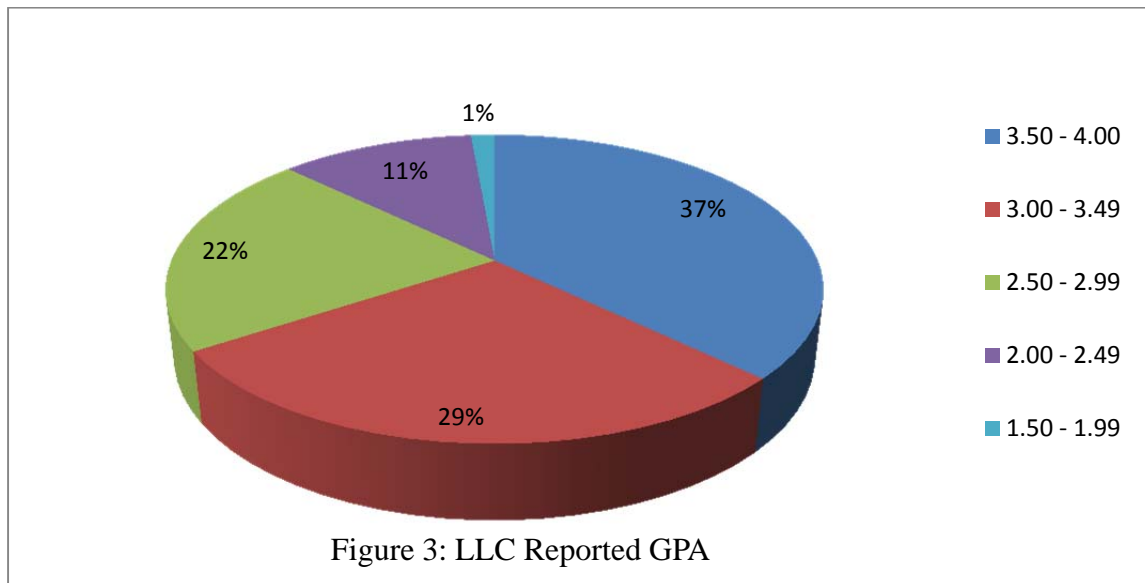
Table 4: Student Participation in Survey by LLC

Living Learning Community	n	Percentage
Agriculture Residential College	4	5.7
Business Residential College	8	11.4
Engineering Residential College	12	17.1
General Residential College	14	20.0
Honors House LLC	14	20.0
Information Technology Residential College	6	8.6
Mass Communication Residential College	1	1.4
Sciences Residential College	11	15.7
Total	70	100.0

The at-risk status of the 70 students that participated in the LLC survey consisted of 51 first generation college students, 10 Pelican Promise students, and 9 that were both first generation college and Pelican Promise students. Participation consisted of 25 males and 45 females.

Identified race by the student participants in the LLC survey included: 49 White / Caucasians, 8 Black / African Americans, 5 Asian / Pacific Islander, 4 Latino / Hispanic, and 4 Multicultural.

A total of 49 out of the 70 students held a job. Of these 49 students that worked, 32 worked on-campus, 13 worked off campus, and 4 worked both on and off campus. Of these students, 86 percent indicated that total number of work hours per week ranged anywhere from 6 to 20 hours. Only 23 percent of the 70 participants had a sibling that was currently attending college. Figure 3 is a chart of reported cumulative grade point averages:



66 percent of students, 46 participants, reported cumulative grade point averages in the ranges of 3.00 to 4.00.

Demographics of Traditional Residence Hall Students

The TRH survey was administered to 151 at-risk sophomore students that lived in TRHs their first year, in the academic year fall 2010 and spring 2011. The survey was administered over a 10 week period. Figure 4 shows the response rate over time for the TRH survey:

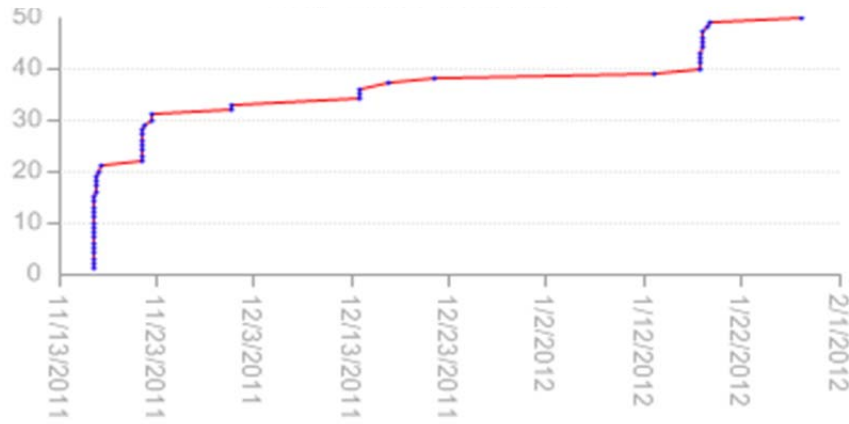


Figure 4: TRH Survey Response Rate Over Time

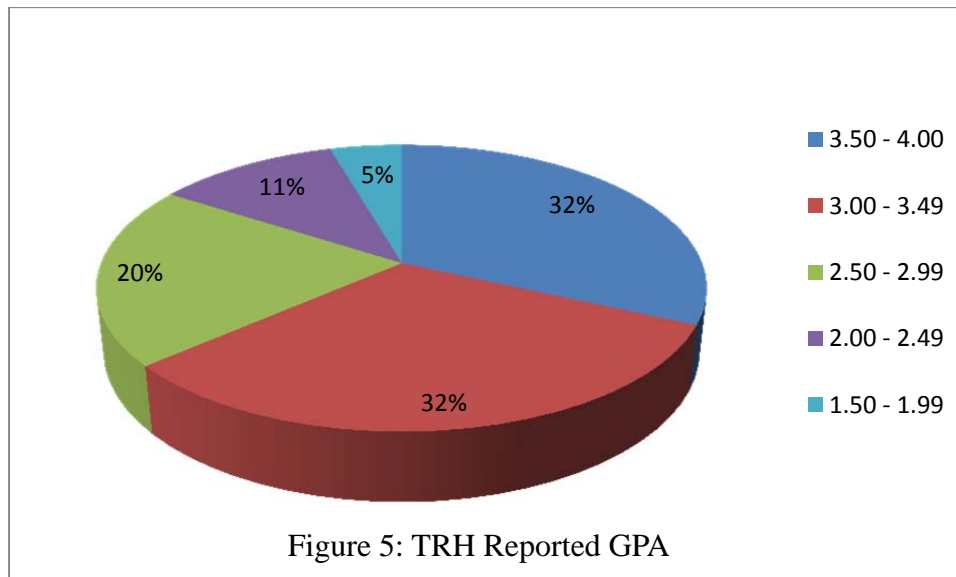
Of the 151 TRH students that were sent the survey, 50 students responded and 44 surveys were totally complete. The 6 surveys that were incomplete were not placed into the quantitative analysis. The survey response for completed TRH student surveys was 29 percent. The 44 participants that completed the survey were in the following TRHs listed in Table 5:

Table 5: Student Participation in Survey by TRH

TRH	n	Percentage
Residence Hall A	2	4.5
Residence Hall B	3	6.8
Residence Hall C	4	9.1
Residence Hall D	2	4.5
Residence Hall E	10	22.7
Residence Hall F	20	45.5
Residence Hall G	3	6.8
Total	44	100.0

The at-risk status of the 44 students that participated in the TRH survey consisted of 30 first generation college students, 7 Pelican Promise students, and 7 that were both first generation college and Pelican Promise students. Participation consisted of 10 males and 34 females. Identified race by the student participants in the TRH survey included: 30 White / Caucasians, 10 Black / African Americans, 1 Asian / Pacific Islander, 1 Indigenous / Native American, 1 Latino / Hispanic, and 1 Multicultural.

For work status of the TRH students, 23 out of the 44 students held a job. Of these 23 students that worked, students indicated the location of their jobs in that 14 worked on-campus, 7 worked off campus, and 2 worked both on and off campus. Of these students, 70 percent indicated total amount of work hours per week ranged anywhere from 6 to 20 hours. Only 34 percent of the 44 participants had a sibling that is currently attending college. Figure 5 illustrates the total breakdown of reported cumulative grade point averages:



64 percent of students, 28 participants, reported cumulative grade point averages in the ranges of 3.00 to 4.00.

Qualitative Procedures

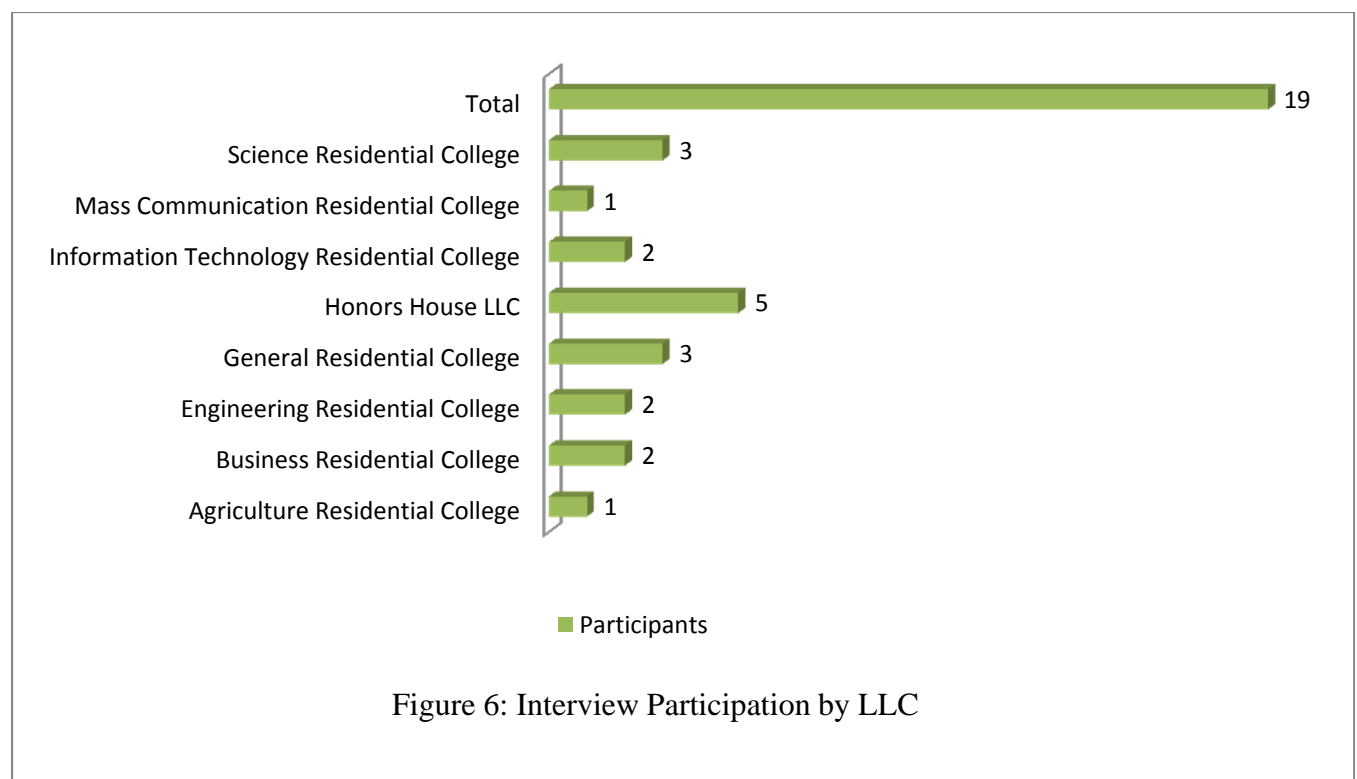
To investigate the student engagement dimensions further, data was collected from focus group interviews, individual interviews, and written communications via email. The interviews and focus groups were transcribed and inserted into Atlas.ti (2011) as documents under four hermeneutic units. The transcript documents were first analyzed for meaning related to a set of *a priori* categories: academic integration, social integration, institutional climate, and peer collaboration and personal growth. The *a priori* categories stem from the National Survey of Student Engagement (2011), student engagement research from Kuh et al.(2005), and Magolda's (2001) self-authorship for the personal growth category. The documents were then coded from subcategories that emerged from the data. Table 6 illustrates each *a priori* category and its associated subcategories.

Table 6: *A Priori* Category and Associated Subcategories

<i>A Priori</i> Categories	Associated Subcategories
Academic Integration – Includes level of academic challenge and faculty-student interaction	academic course scheduling, academic grades, academic residential college programs, academic requirements, faculty office hours, other faculty interaction, in-class peer interaction, peer study groups, rector interaction, and tutoring
Social Integration – Includes co-curricular activities	LLC non-academic programs, program advertisement, student organizations and extracurricular activities, and residential college decision making
Institutional Climate – Includes academic and campus climate	Connections with LLC peers, campus belonging, LLC study climate, LLC experience, and university experience
Peer Collaboration and Personal Growth – Includes active and collaborative learning and personal growth	Management of academic responsibilities, growth in emotional maturity, leadership skills, level of participation in student organizations and extracurricular activities, experienced change in personal growth, and clarification of sense of life goals

Overall 27 percent of the students that completed the LLC survey participated in focus groups, individual interviews, or submitted personal communications for this study. The at-risk status of the students that participated in the qualitative data collection was 13 first generation college students, 2 Pelican Promise students, and 4 that were both first generation college and Pelican Promise students. The gender of these students consisted of 11 females and 8 males.

Figure 6 shows the distribution of the interview participation across the LLCs:



The remainder of this section will discuss the quantitative and qualitative analysis of the four research questions.

Impact of LLC Participation on Student Engagement

Student engagement dimensions in the LLCs measured in this study were: academic integration, social integration, institutional climate, and peer collaboration and personal growth. The survey questions were clustered into the four student engagement dimensions by a factor analysis before the survey was sent to LLC students. Details related to the factor analysis are discussed in the research methods section of this study.

The researcher used the Statistical Package for Social Sciences (SPSS) to analyze the quantitative survey data. All survey questions were scaled from 1 being the lowest to 5 being the highest. Academic integration, social integration, institutional climate, and peer collaboration and personal growth questions were grouped in SPSS. The researcher computed the raw scores for each participant's dimension of student engagement. Then the average score for each engagement dimension was computed for each participant and recorded as a new variable. The highest mean score was found for the dimension of institutional climate (\underline{M} =3.98), followed by academic integration (\underline{M} =3.51) and social integration (\underline{M} =3.50). The dimension for which students had the lowest mean score was peer collaboration / personal growth (\underline{M} =3.14). To develop deeper understanding of students' perceptions and experiences relevant to each of the dimensions of student engagement, data was collected from focus group interviews, individual interviews, and written communications.

Academic Integration

Analysis of survey responses for academic integration indicated that \underline{M} =3.51, SD =.82. Many comments pertaining to academic integration were made by students during the interviews. After identifying segments of the text that were aligned with the *a priori* code of academic integration, ten subcategories emerged (See Table 6). These subcategories included:

academic course scheduling (7 instances), academic grades (4 instances), academic residential college programs (5 instances), academic requirements (4 instances), faculty office hours (10 instances), other faculty interaction (12 instances), in-class peer interaction (3 instances), peer study groups (11 instances), rector interaction (2 instances), and tutoring (11 instances).

Students seemed knowledgeable of academic course scheduling opportunities with their counselor or advisor. Some of the LLC rectors were mentioned by name when students referred to the person with whom they scheduled their classes. Students commented that, “I would talk to her whenever I was doing my scheduling” and “we would just go see our advisors and they were pretty helpful with it.” Another student gave a more detailed response stating, “I had office hours with her to help with scheduling and planning classes and that was really useful because she gave me a lot of insight on which classes I should take next.”

Students expressed the importance of their academic grades and the strides they needed to take to achieve academic success. One student said that “...chemistry was something that I struggled with when I first came here and it just wasn’t working for me. I ended up with an “A” but I took advantage of his [professor’s] office hours.” Students mentioned that being around students that took the same courses helped them with coursework. Specifically, one student said, “I would have probably failed calculus if I wasn’t with them and I got a B in the class.” Another student added that when she lived in her LLC her grade point average was a 3.80 and it was now lower in her sophomore year.

LLCs sponsored programs to enrich students socially and academically. Some of the academic programs’ focused on environmental issues, faculty research series, service and leadership, medical school testing, and career panels. One student that attended several research series said, “the topics were never drab...Also, the instructors are always thoughtful, and it’s

clear that they have a real passion for what they are presenting.” Another student attended a career panel and thought that it “was great for me because I came into the college with no idea what path I wanted to take.” Students mentioned that they enjoyed the discourse with their LLC professors and peers at these academic LLC sponsored programs.

When discussing academic requirements, students would list them in a variety of ways. One student said since biology was his major, he knew that most of his course work would require him to take large lecture classes but that his honors class would be substantially smaller. Specifically a student said that:

Aside from that, living in an honors dorm keeps me on my toes about honors requirements. If there's any confusion I have about a course or honors option, I know I can go to anyone at the front desk and they can answer it for me.

Students also related academic requirements to the number of classes or hours they took in their first year. Students did not have a consensus about academic requirements but they seemed to cover their perception of what was important for them to know at that time.

Faculty office hours were important in the success of the students' academic life. Students liked the convenience of faculty having office hours in the LLC. Students said:

Yes, they came in and if we just saw them on a regular basis we would ask questions pertaining to like the upcoming test or something. We had better access to them than having to go and find his office somewhere on-campus and setting time away whereas he was already there. He came to us which is a lot more convenient.

He's very helpful, he's very intelligent and he makes it fun. He cracks jokes sometimes and I enjoyed him as a chemistry professor. I really did. He was one of my favorite. He's very patient with helping you. Like...whenever he's helping you, you didn't feel like he was rushing to get you out of his office.

Some students whose classes were not offered in the LLC classrooms also received office hours from faculty in their LLC. Another student attributed her experience with faculty office hours at

her LLC to helping her not to be “hesitant to ask my other professors for help” that were not in the LLC.

Other than office hours, students interacted with their LLC faculty in many ways. Faculty interaction included student email to faculty about guidance or questions, casual conversations at social events, faculty-led study sessions, and interaction with faculty at programs. One honors student said, “Like I took him last year but we are still talking outside of class.” Another honors student said her faculty advisors agreed to recommend her for a campus academic program in her major. She added, “if it weren’t for them, I wouldn’t have been able to get as personalized of a recommendation.”

Students were able to mingle and interact with the families of their faculties in some cases in discipline specific LLC programs like the Science Residential College. An engineering student said that he “established a relationship with the faculty” while in the LLC. He also added that he especially developed this faculty relationship because now “he’s my current Circuit [electrical engineering] professor. So I’ll be seeing him all through my career.” In addition, discipline specific students in the Science and Business Residential Colleges indicated that the majority of their faculty was at most of the LLC events.

Some students mentioned having good interaction with peers because of them taking the same classes. One student said:

I think like most of the friends I made were in the Honors classes, like classmates. Like we were forced to interact because of homework, or projects, or studying for a test or something like that...We unite somehow to get through these classes.

Although there were some students that preferred studying individually, many of the students thought that peer study groups were instrumental to their academic success. Students made comments about peer study groups such as, “we studied together many times” and “it was great to be able to all get together in a study room and work through different problems.” Students attributed the ease of formation of study groups to living together with their peers and the availability of LLC study areas. One student said, “It gave us common classes that we could study for.” Some students complained that more study areas or rooms are needed in the LLCs. Students would also use their rooms as a study space. A student mentioned that “it was very convenient. Especially our hall was really friendly so we’d all help in accounting. We’d all come in one person’s room and help in accounting.”

There were students in non-discipline specific LLCs that said that they preferred to study individually. A general residential college student explained that she liked to study in her residence hall room at her desk by herself. In particular, one honors student explained:

There are no distractions or disturbances like people laughing incessantly in the hallway because everybody is respectful of the fact that you have work to do. There's a mutual understanding among honors students living in the dorm that each and every student has a ton of work to do almost every night. I never have had to go to the library to study because of distractions because my dorm, during quiet hours, is exactly that, quiet.

Other honors students’ comments included, “I guess a lot of people took advantage of that but I didn’t because I’m a more of a study by myself person” and another used the study room as a means to socialize and meet others—not to study with peers.

Rector interaction was mentioned specifically in the area of general questions, scheduling classes, and offering a student advice on studying abroad. Tutoring from faculty / teaching assistants (TA) / graduate assistants (GA) and supplemental instruction (SI) sessions were used

heavily in some LLCs. Some of the subjects included in these academic support opportunities included English, economics, chemistry, business administration, biology, and others. One student commented, “I thought it was very helpful that they had a time set for us to go and actually help us with homework and stuff and answer questions.” Another student talked about her chemistry tutor and said, “She came like twice a week and we could go sit down there in the little classroom for two hours and just ask her whatever we needed for homework and stuff.” A student said economics SI helped him because he “would not have done near as well” as he did without it and it made him study more than he would have. An engineering student mentioned that SI taught him how to study. An honors house student said, “I wish we would have had study sessions / exams hosted by some faculty in our residence halls.”

Social Integration

Analysis of survey responses for social integration indicated that $\bar{M}=3.50$, $SD=.81$. Social integration was mentioned by students through their different experiences in the LLC and at the university. After identifying segments of the text that were aligned with the *a priori* code of social integration, four subcategories emerged (See Table 6). These subcategories included: LLC non-academic programs (25 instances), program advertisement (2 instances), student organizations and extracurricular activities (20 instances), and residential college decision making (3 instances).

A variety of non-academic programs were offered in the LLCs including socials, parties, holiday gatherings, tailgates, and watching movies. A few students said that these programs were advertised via flyers and weekly newsletters. Students made comments about the programs such as “those were a fun break”, “met new people”, and did it because it was fun. Specifically,

the programs listed by the students were ice cream socials, gaming parties, snow balls with a rock climbing event, special marathons, Halloween events for local children, and tailgates for football. In particular, a few students mentioned an impromptu social with the “stoop” people; these were students that were always socializing on the patio of the General Residential College. These stoop people along with the resident assistants played music and provided snacks on the stoop for the many students that were in attendance. A student said, “Over these past two years, I’ve been less anxious and more eager to participate in social activities because I know they will probably be fun.”

Many students participated in student organizations and extracurricular activities. Some students justified inactivity with student organizations and extracurricular activities with lack of time, heavy class loads, “I wanted to do something fun, not more work”, membership in other student organizations, and wanting to spend their time on other things. Students did say that these organizations and activities were advertised and sometimes if you did not know what was going on “you saw them setting up on the grounds.” Students participated in the university band, student government, residence hall association, intramural sports, campus environment initiative programs, fraternities, and more. One student said that because you are already on-campus, “you’re more likely to get involved in activities on-campus and organizations on-campus when you live here. You have more knowledge of what’s going on.” A student commented about her sophomore experience with student organizations and extracurricular activities, “so I miss living on-campus kind of because I don’t know as much going on, on the campus and I liked doing things.”

Students participating in their residence hall association handled residential college decision-making. One student was the president of her LLC community council and she helped to put on many of the events. Another student helped plan events for their LLC “through RHA” [residence hall association]. In addition, a student said, “We had weekly meetings to plan events and make capital improvements for our community.”

Institutional Climate

Analysis of survey responses for institutional climate indicated that \underline{M} =3.98, SD =.90 and had the highest mean of all the dimensions. Institutional climate was mentioned throughout the student interviews. After identifying segments of the text that were aligned with the *a priori* code of institutional climate, five subcategories emerged (See Table 6). These subcategories included: Connections with LLC peers (35 instances), campus belonging (9 instances), LLC study climate (20 instances), LLC experience (30 instances), and university experience (7 instances).

Connections with LLC peers were mentioned throughout the qualitative data in various ways. In-class discussions with peers was mentioned by students stating that they would “bounce ideas off each other” from class. They also talked about sitting near each other in class and “if we had a problem we’d text each other. Like ‘Do you know how to do this problem?’ ... ‘Did you get the notes, like I missed class today?’” Students attributed connections with peers in class by living with them in the same LLC and having the same classes together. Their connections included studying together, peer competition with class grades, and group projects. Students’ comments included, “Well since everyone’s in the same classes that are living in the dorm I especially utilized them...since we’re all taking the same chemistry final”

and “we studied together many times, and I believe that helped us excel in our classes.” Another student spoke of competition with her peers in terms of academic grades:

I was presented with a competition factor. Like the fact that you have everyone in the same building with the same classes all taking the same test tomorrow. And not everybody’s going to get the same grade so you’re intimidated by people who, you know, don’t even prepare and do well.

These students experienced their LLC being impactful in many different ways in their connections with peers in classes.

Students’ LLCs helped them to socialize more with their peers. This was expressed by the students comments that “it definitely help[ed] me become more social”, “I came from out of state...I didn’t know anybody...it got me more connected to [the university] by bringing people that got me involved with sporting events,” and “living with your peers also works like as a networking opportunity.” One student elaborated that:

If I had lived in a dorm that didn’t offer so many opportunities for the students to get together, I would probably have been so shy that I would never have really interacted with people, and I could have ended up a lot less happy than I am now.

Moreover, another student said, “It was easier because I would have never made friends with those people if I wouldn’t have lived there...you start conversations and you make friends.”

Students expressed that their LLC was impactful in having good friends at the university. Students made comments such as, “My best friends in college today are the ones I met in” my LLC, “I’m good friends with those guys now”, and “...towards the end of my first year we all got to be really good friends.” One student said, “We were friends because we lived together and we had the same activity and I find if you don’t have friends then you kind of get lost in such a big school.” Another student explained that:

I think the biggest impact that living in the residential college had on me was the friends that I made. I see someone I know every time that I walk across campus. Knowing all of these people really makes [the university] seem like one big family. I don't know all of them extremely well, but I know that I could ask any of them for help if I ever needed it. Living in [my LLC] really helped me to build a community of friends in this brand new city.

Some students added that their friendships with LLC students still exist and some currently room with them.

Students' LLC experiences helped them to develop feelings of campus belonging.

Students mentioned, "Just living on-campus in general helps with the connection to [the university] because you are always on-campus, you're always here. Everything is within walking distance" and "I feel like the people who live off campus are somewhat disconnected from the university." The students agreed overwhelmingly that living on-campus helped them have feelings of belonging to the university.

The students' perceptions of the LLC study climate were also apparent. One student remarked "Everybody is respectful of the fact that you have work to do...every student has a ton of work to do almost every night", the "study rooms were great places to study and get together with friends", and students would "sit around a table and exchange work and study." One student explained:

I also definitely started learning how to study better because coming from high school I never studied and it was a big help to have people who were in my major, in my classes where I could study with them and get a good foundation for that first year.

Students used the commonality of living in the same space and sharing the same classes to develop positive feelings toward studying in their LLC.

Students expressed that their LLC experience was very positive. Students said that their LLC was “the best dorm on-campus, there’s nowhere else where the faculty is so happy to help you”, it “was a very good place to live”, “it makes it even better, just seeing familiar faces”, and “It’s a community. You are not just like going back in forth from class. You are meeting people.” When asked if they would recommend a first year student to their LLC most students said yes: “It’s the best experience, it influenced me to live on-campus again, it was so much fun, it’s a great idea, I swear you won’t regret it, it really enriches your experience, and it would be a safe bet for a good freshman year.”

University experience was mentioned eagerly by the students. An out-of-state LLC student commented on the LLC contribution toward university support in saying:

I think because there is so much going on and they build it up so much, even if you are not explicitly involved with it, it still gives you that sense of being supported and I think that is really important.

Another student said:

The people are always sweet and willing to help you out if you ever trouble, in life or in the classroom. Every single person that works in that building is dedicated into making it feel like home to you, and their efforts almost always pay off.

Students’ experiences at the university included participating in university-sponsored programming and events by academic colleges and student affairs areas. A student commented on university social programming by stating, “I don’t think I would have attended events...if I lived off campus. Because I lived so close to where these events were hosted I attended them every chance I got.” Another student said that they would “partake in a lot of the things” in their academic college. A student mentioned, “it was nice to know that not everyone in college was here to party but you can have fun even in a calculus study group with some friends.”

Peer Collaboration and Personal Growth

Analysis of survey responses for peer collaboration and personal growth indicated that $M=3.14$, $SD=1.11$. Peer collaboration and personal growth was discussed in the student interviews. After identifying segments of the text that were aligned with the *a priori* code of peer collaboration and personal growth, six subcategories emerged (See Table 6). These subcategories included: management of academic responsibilities (13 instances), growth in emotional maturity (5 instances), leadership skills (3 instances), level of participation in student organizations and extracurricular activities (7 instances), experienced change in personal growth (6 instances), and clarification of sense of life goals (1 instance).

The students explained that their LLC helped them with the ability to manage academic responsibilities and activities. A student stated:

I've even gotten better at balancing social and academic activities because when you live with the people you go to school with, you have to learn when it is time to just have fun with them and when it is time to be serious and focused.

A few students commented that the LLC “keeps me on my toes about honor requirements” and “it helped me learn that even though we are all smart individuals but we all have to study differently. We all can’t take the same course load as other people and expect to do well.” Students experienced change in their study habits and few students’ commented that “I learned some valuable study skills, I studied more when I had another person in the room”, and getting “a good foundation” for study skills through the LLC.

Students that experienced change in emotional maturity spoke a lot about dealing with “roommates” in that living together makes you “grow up and helped me develop patience.”

Students said that “everyone is so different than me and everyone grew up different, your mama’s not there to take care of you”, and it “helped me to learn how to live independently.” A few students experienced growth in their leadership skills. Two students explained:

I think in high school, I was always a leader, but it was never, you never really got developed into it too much. Like they put you into the programs to be a leader, but they were always, especially in high school, kind of crap. But within my group of friends, I was something of a leader. I think it really helped develop my leadership abilities, not in like the traditional sense of a leader, like president, that sort of a role but more as like the, I guess like a ring leader almost. So, it helped me develop my leadership amongst peers and like it also helped me socially.

The honors community also helped me realize that I wanted to become a resident assistant which has shaped my life even more so than being a resident. Being an RA is hard at times, but it is also very rewarding. The other girls on my staff are an amazing support system, and the residents that I’ve met are extremely nice. I am definitely glad that I decided to live on-campus.

These students had very different leadership growth experiences but they attributed their participation in their LLC to this positive growth.

Students experienced an increase in participation in student organizations and extracurricular activities by being provided with opportunities from the LLC to “get active when I saw how involved the rest of my peers was, I don’t see how I would have become so involved if I had not lived in” my LLC, and “it made participating much easier. The majority of the meetings for the organizations that I’m in are held on-campus.” Another student said that “This saved me a lot of time, thus probably allowing me to participate in more activities than if I would have been able to if I lived off campus.” Again, there were students that said that they did not participate in student organizations and extracurricular activities for various reasons.

Comments from students describing their personal growth ranged from sayings of “It’s helped me come out of my shell, helped me become more social”, classes “opened up my

interests”, and the LLC experience helped with shyness. One student explained that she experienced change in sense of life goals with her advisors help in that:

They push you to like think ahead, think of the future. Like its not just about what you are doing now, the class you’re in now, plan ahead for studying abroad. Or plan for an internship or something. Umm, and I definitely plan on doing those things. I don’t know, I probably just get more ambitious all the time.

In summary, at-risk students were active in each student engagement dimension. The quantitative data provided statistical values relevant to the research question. The qualitative data helped to bring meaning of at-risk student perceptions in regards to student engagement dimensions: academic integration, social integration, institutional climate, and peer collaboration and personal growth.

Perceptions of LLC Support Opportunities

Student participation in LLC support opportunities were addressed through specific survey items that were analyzed using students’ responses. The frequency was computed for items of survey questions 25 through 35. All 11 survey questions asked the student to assess the level of participation in the support opportunities separately. The scale that was used for students to assess their participation level consisted of 1—Not at all, 2—one to three times, 3—four to six times, 4—seven to nine times, 5—10 or more times.

The mean scores of the results of student participation ranged from 1.74 to 3.11. Table 7 lists all mean scores and standard deviations associated with their participation of LLC support opportunities:

Table 7: Mean Scores and Standard Deviations Associated with LLC Support Opportunity

LLC Support Opportunity	Mean	Standard Deviation
Mid-Term or Finals Study Break / Breakfast	3.11	1.32
Peer Study Groups with Fellow Residential College Students	2.94	1.58
Residential College (RA) Resident Assistant Floor Programs	2.67	1.23
Residential College Community Wide Events / Programs	2.54	1.19
Peer Mentoring by Fellow Residential College Students	2.30	1.44
Faculty Tutoring in your Residential College	2.20	1.51
Study Skills and Tips Programs in your Residential College Building	1.97	1.24
Rector Advising	1.94	1.14
Faculty Office Hours in your Residential College Building	1.84	1.22
Faculty Discussions Groups in your Residential College Building	1.83	1.23
Residential College Community Council	1.74	1.24

During the qualitative interviews with students, all listed opportunities or services were mentioned.

Study breaks. Mid-term study breaks and breakfasts were mentioned in some of the student interviews. In particular, students said:

Another thing that I have really appreciated...is the food provided during finals week. I don't normally get breakfast in the morning because I want to conserve my meal plan, so I loved being able to eat a full breakfast before all those crazy tests.

During finals week we were lucky enough to get served breakfast in the lobby that made life so much easier to be able to just get something and go back to studying.

Some students appreciated the convenience of having these meals in their residential college building because it did not take away study time to leave for food.

Peer study groups. Peer study groups were popular with the LLC students and they had a variety of ways of establishing, organizing, and conducting them. Students would comment on studying with someone one-on-one or with more than one student. In addition, students would add information about the study environment in their rooms and common spaces such as study rooms. One student explained that she would text another student when trying to figure out how to do her homework as a form of group communication with coursework. The following are statements from students regarding their forms of peer study groups with residential colleges:

I think the main thing was having people in the building that had the same classes. Cause I remember sometimes we would slip papers under each other's doors, like notes or stuff, or like we needed help on the homework or be able to – and we weren't even; let's say I was in class and my friend was bringing me something. She'd just slip it under my door. So just being able to have someone else there that was in the same class, maybe you didn't get all the notes or a problem. I was really good in calculus and my friend she struggled a lot. So a lot of times I wasn't able to help her but I would give her my homework page with it worked out to show her how to do it. I would just slip it under her door and then she would text me like, "Where'd you get this equation from," you know, just stuff like that.

I'm really bad about studying. And it was also really convenient; especially our hall was really friendly so we'd all help, especially in accounting. We'd all come in one person's room and help on accounting. So it was real close knit and everyone knew each other.

Well since everyone's in the same classes that are living in the dorm I especially utilized them. The second semester I was there more than the first semester because I'm a shy person, but we all kind of got in the lobby during finals week and since we're all taking the same chemistry final; no matter who had which teacher we worked out the previous exams on a big white board...Whoever understood it taught it to us and so we were all able to grasp it... I learned some valuable study skills because I didn't have to study in high school, so other students taught me how to study.

Students were very pleased to have common spaces like a study room to meet with their peer study groups. Students expressed that it was easy for people to use those spaces to "get more points of view on" the subject matter from peers. One student requested an enhancement in

some of the study rooms by adding, “I don’t know if this is going to change anything but they need white boards in the study rooms.”

Moreover, a common theme that emerged with all students was that because they lived in the same residence hall and were enrolled in the same courses, it was easier to find someone to study with and form peer study groups. A student said, “So, all of the people that I lived with were taking that class and we were in the same building as I was. So, a lot of times we worked together because we lived in the same building and we had all the same classes.” Another student commented that during a study group session, “we all had a common goal and we were able to focus on working together through studying and through answering each other’s questions and teaching each other what the material was, and keeping each other focused better.”

Resident assistants floor programs. Residential college RAs were cited in the interview discussions by students. In particular, the interview question was focused on RA floor programs. A student said, “Sometimes the RAs’ will get together to plan things like a night in the quad playing capture the flag, and that is always fun too,” and “we decorated cookies one time with the RAs... I just went and stopped by to say hey to people.” Moreover another student added:

I remember the one night our RA did like the LAN party idea where we all joined up online and played Call of Duty until like 5:00 in the morning. We would all just hang out and play video games and watch movies. Like one time, down in the aquarium, we watched Mulan and there was like twenty of us. We just did stuff like that.

Students talked about being excited to attend their floor programs with their RA and other residents. When talking about mandatory meetings with the RA the students seemed easygoing when they had to attend these also. An engineering residential college student added more information specifically geared toward the influence his RA had on his major and coursework:

I mean my RA was the best simply because he was in my major. So I can go to him for every subject I needed. I could talk about stuff with him about just basic engineering struggles, sleeping patterns, and stuff like that. How to cram for tests, stuff like that, all that.

In addition, an information technology residential college student said that the information technology assistants helped them with their computer science classes. Other students in the interviews related their RA floor programs to mandatory floor meetings, safety meetings, and end of semester closing meetings.

Residential college community wide events / programs. LLC community-wide programs varied in subject matter and type for each LLC. There were some common programs such as ice cream socials, tailgates, and crawfish bowls that were offered across all LLCs. For instance, one student said that she attended a social program that celebrated Cinco de Mayo with a party and received “information about the Mexican heritage.” Then another student mentioned that she attended an event called “gazing at the stars...we watched a movie out on the lawn...and then we looked through a telescope at the stars.”

Some of the other community-wide programs offered in the LLC that were talked about in the interviews were:

Another great thing that Honors College does is to provide career panels where students can go to talk to professors and professionals from different careers, which was great for me because I came into college with absolutely no idea what path I wanted to take.

I participated in the beginning of the year ice cream social. This was a great opportunity to meet other people that lived in my hall, and I’m very glad I went. I still talk to some of the people that I initially met at that social. Another program I attended was the Pamper Me Program for the girls. I only got to go for the last part of it, but they made face masks, painted nails, and did other spa-like things for all the girls in the honors community.

Boo in the shoe (I loved the play and the haunted house), the visit to the natural science museum on-campus (I found out my roommate was scared of snakes so that made for a fun night...There was also one time where they brought us a rock wall and snowballs that was fun to be able to test yourself against other peers (I made it to the top of the hardest one and was super proud of myself).

We had two that we called them land parties and basically we just brought in a bunch of TVs and Xbox and PS3s' and stuff and for the one they brought in a guy from GameStop. Like it was right when the Kinect came out and they were demoing that which was pretty cool. So it was just a good way to sort of bring everybody together.

Many students raved about the free food and it being a top reason they would attend community programs. Some students were excited about their "chemistry nights, dinner nights" with faculty, and the very popular crawfish bowls. In many cases students were able to enjoy interaction with faculty at these programs and sometimes faculty would bring their families to the events.

There was a mixture of academic and social programs being held in the LLCs. In some LLCs these community wide programs brought in other university organizations to encourage campus involvement. Some of the programs offered at the LLCs included:

The only thing I can think of was the alpha kappa psi meeting, the informational meeting that they had there. I went there a couple of times... I also went, I now remember, I also went to an inter-auditing meeting.

I went to a couple of meetings with random engineering companies that would come and talk to us or one of the organizations on-campus such as NSBE- National Society of Black Engineers... the entrepreneur club, like clubs and stuff...I also walked into the dance thing.

Some students attributed their lack of participation to not being interested, night class conflicts, being too busy, and other factors that restricted their involvement in campus events and programs.

Peer mentoring. Two Honors House students indicated a form of peer mentoring by fellow LLC students. One student said:

I knew I wanted to get active when I saw how involved the rest of my peers were. It's not so much of a "My resume needs to be as good as theirs, or I won't get a job," mentality but rather a, "Wow, look at all the things they can do. I bet I could do that too," thing. Everyone in my dorm sets a really good example, and I, along with many other residents, look up and aspire to be as good and well-rounded as them.

Another student spoke of friends helping him with scheduling advice.

Faculty tutoring and study skills and tips programs. Faculty tutoring was said to be beneficial to most students that were interviewed. Some faculty would also send their teaching assistants (TAs) or graduate assistants (GAs) to tutor the students instead of coming themselves. A student said that the “TA would go over the study guide” with them before a test in their residence hall. Other faculty would also offer supplemental instruction (SI) to help students with their class. Students’ comments on faculty tutoring in the residential college included:

I went to the tutor sessions... She helped me with my chemistry homework, and she was a chemistry and physics tutor... Yes, she was the only tutor that came to us. She came like twice a week and we could go sit down there in the little classroom for two hours and just ask her whatever we needed for homework and stuff.

I utilized the GA study sessions... for econ and accounting... I know for my economics test I would not have done near as well as I did without having gone to the supplemental instructions the day before the test and actually it just forced me to study a little bit more than I probably would have.

Same thing, I went to the SI groups they had for chemistry and physics...I thought it was very helpful that they had a time set for us to go and actually help up with homework and stuff and answer our questions... It did help a lot with the studying part with SI. They’re teaching us how to study and everything and how often we should study because it’s a lot more often than I was used to and in the long run it showed me how.

One student said that “...it was very helpful being able to talk with the professor the night before the exam.” Analysis of survey responses for study skills and tips programs in the residential college building indicated that $\underline{M}=1.97$, $SD=1.24$. The only reference of study skills and tips that emerged was by a student who said, “I went to some of the RA programs where you like talk about study tips and stuff.”

Rector advising. When discussing rector advising in the LLCs, students mostly mentioned scheduling classes with their rector. However, some students spoke of extensive advising that included:

And that was very helpful. That was a big part of, you know, trying to be more ambitious and like wow this is serious. I was excited. He helped me with schedule and what classes to take. I was trying to get sophomore honors distinction which I don't think I'll get. He advised me and told me what would be a good idea. Just keep encouraging me to study abroad and look into things.

... they are always happy to give me advice any time I ask. They were even both willing to write me recommendations when I applied to LA-STEM this year. That was particularly great because I probably haven't gotten to know any other faculty member on-campus as well...due to large class sizes, so if it weren't for them I wouldn't have been able to get as personalized of a recommendation.

I would talk to her whenever I was doing scheduling I went and talked to her. Also she would see me in the cafeteria and she would say, "Hi." It was really a cool thing...she's one of the few professors who actually know my name.

Moreover, students spoke about scheduling for the majority of the rector advising questioning.

Faculty office hours. Faculty office hours in the residential college buildings were mentioned from the students throughout all the LLCs. Students commented that they would use this office time with faculty to answer questions, get advice on papers, and a variety of other consultations:

They came in at certain times. I do think that there was more than just him. He's the only one that I took advantage of... Because chemistry was something I was struggling with when I first came here and it just wasn't working for me. I ended up with an A but I took advantage of his office hours... He's very helpful, he's very intelligent and he makes it fun. He cracks jokes sometimes and I enjoyed him as a chemistry professor. I really did. He was one of my favorite. He's very patient with helping you. Like...whenever he's helping you, you didn't feel like he was rushing to get you out of his office.

Many of the teachers had office hours and they had an office downstairs, and so they were able to do office hours downstairs as well. And so I went, I met with a couple of my teachers but I really didn't do it as often as they were there. They were there a couple times a week.

Another student said, "She had office hours downstairs and if we needed help with a paper or whatever, we could go down and she would proofread it or give us advice or anything."

Students did comment that it was very convenient to have faculty right in your residence hall rather than across campus.

Faculty discussion groups. One Science Residential College student and three Honors House students discussed faculty discussion groups in their LLC. Specifically a few of the Honors House students stated:

I have attended several of the faculty research series presentations...because of how well they related to some of my courses as well as to the...service and leadership program that I joined. The presentations focused on issues such as coastal erosion and poverty...I always really enjoyed attending them.

The research series were the only activities that I consistently attended...The topics were never ordinary or drab. I actually plan on going to this year's series about John Wayne. Also, the instructors are always thoughtful, and it's clear that they have a real passion for what they are presenting.

Residential college community council. One Honors House student and one business student mentioned their residential college community council. These students were directly involved as officers in their community council:

I also attended events sponsored by community council such as the pumpkin painting party, spring egg hunt, mid-semester cool-down ice cream party, Valentine's card making, and the Mardi Gras king cake party. I was the president of our community council, so I helped to put on many of these events. The attendance wasn't as high as we would have liked, but I enjoyed hanging out with the people who came... I also interacted with my peers through community council. We had weekly meetings to plan events/make capital improvements for our community. I got to know these people pretty well.

My RA knocked on my door because I had moved in early for a training council conference, which it is for RHA [Residence Hall Association] and just went over all the rules real fast, and he goes, "You should've run for president"... Well, it definitely got me involved with RHA and I was the only executive staff.

In summary, many of the support opportunities were used by the at-risk students who were interviewed. However, it cannot be determined whether higher mean scores are related to support opportunities offered more frequently or if there was a higher level of participation. The mean scores from the survey provided statistical values relevant to the research question, but the qualitative interviews provided insight and detail to their meaning.

Comparison of LLC Students with TRH Students

A comparison of perceptions of student engagement for LLC and TRH students with respect to residential environment was explored. In order to examine this statistically, a one-way multivariate analysis of variance (MANOVA) was performed. Raw scores for each participant's engagement dimensions were computed to obtain a mean score for each dimension. Four student engagement dependent variables were used: academic integration, social integration, institutional climate, and peer collaboration and personal growth. The independent variable was residential environment: LLC environment and TRH environment. Before the MANOVA was conducted, assumption testing was performed that included: sample size, normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity (Tabachnick & Fidell, 2007). Since the assumption test was completed with no serious violations, a MANOVA was conducted (See Appendix G).

When conducting the MANOVA, Box's test of equality of covariance matrices was used to ensure that the "data does not violate the assumption of homogeneity of variance-covariance matrices" (Pallant, 2010, p. 294). Box's significance value was .429 which is greater than .001, indicating that this assumption was not violated. Next, Levene's Test of equality of error variances significance values for the four dependent variables were academic integration = .844, social integration = .982, institutional climate = .228, and peer collaboration and personal growth = .308. These significance values were not less than .05 indicating that this assumption was not violated (Pallant, 2010).

Multivariate tests were conducted to "indicate whether there are statistically significant differences among the groups on a linear combination of the dependent variables" (Pallant, 2010, p. 294). The set of multivariate tests included Pillai's Trace, Wilks' Lambda, Hotelling's Trace,

and Roy's Largest Root. Tabachnick & Fidell (2007) recommended using Wilks' Lambda when using the multivariate tests "for general use" (Pallant, 2010, p. 294). Using the variable Environment_Type section of the multivariate tests, the Wilks' Lambda value was .674 with a significance value of .000, which is less than .05. This significance value indicates that there is a difference between the groups. Therefore, there was a statistically significant difference between the perceptions of LLC and TRH students with respect to student engagement. An examination of the mean scores indicated that LLC students reported more positive perceptions with respect to student engagement.

Since a statistical difference was found, the test of Between-Subject effects was displayed in the SPSS output file. To reduce Type I error, finding a significant result in error, the alpha level is reduced (Pallant, 2010). Therefore, a Bonferroni adjusted alpha level of .01 was used to measure the dependent variables individually (Tabachnick & Fidell, 2007). The two variables that reached a statistical significance as a result was academic integration ($p = .000$) and institutional climate ($p = .008$), both of which had significance values less than .01.

The effect size, partial eta squared, "represents the portion of the variance that can be explained by the independent variable" (Pallant, 2010, p. 295). Academic integration had a partial eta squared of .112 or 11.2 percent and institutional climate had a partial eta squared of .062 or 6.2 percent. An examination of the mean scores indicated that LLC students reported more positive perceptions with respect to academic integration ($M = 3.505$, $SD = .82$) than TRH students ($M = 2.916$, $SD = .80$). In addition, it revealed mean scores that indicated that students who participated in LLCs reported more positive perceptions with respect to institutional climate ($M = 3.978$, $SD = .90$) than TRH students ($M = 3.477$, $SD = 1.044$).

LLC Design Type Comparison

An analysis was conducted to compare the perceptions of student engagement for those students living in a discipline specific LLC with those living in a non-discipline specific LLC. In order to examine this statistically, a MANOVA was performed. Raw scores for each participant's engagement dimension were computed to obtain a mean score for each dimension. Four student engagement dependent variables were used: academic integration, social integration, institutional climate, and peer collaboration and personal growth. The independent variable was LLC type: discipline specific LLCs and non-discipline specific LLCs. Discipline specific LLCs included the Agriculture, Business, Engineering, Mass Communication, and Science Residential Colleges. The non-discipline specific LLCs included the Honors House LLC, General and Information Technology Residential College. Before the MANOVA was conducted, assumption testing was performed that included: sample size, normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity (Tabachnick & Fidell, 2007). Since the assumption test was completed with no serious violations to report a MANOVA was conducted (See Appendix H).

When conducting the MANOVA, Box's test of equality of covariance matrices was used to ensure that the "data does not violate the assumption of homogeneity of variance-covariance matrices" (Pallant, 2010, p. 294). Box's significance value of .364 far exceed the value of .001 which is required for this assumption to be violated. Next, Levene's Test of equality of error variances significance values for the four dependent variables were academic integration = .782, social integration = .611, institutional climate = .209, and peer collaboration and personal growth = .721. These significance values were not less than .05, indicating that this assumption was not violated (Pallant, 2010).

Multivariate tests were conducted to “indicate whether there are statistically significant differences among the groups on a linear combination of the dependent variables” (Pallant, 2010, p. 294). The set of multivariate tests included Pillai’s Trace, Wilks’ Lambda, Hotelling’s Trace, and Roy’s Largest Root. Tabachnick & Fidell (2007) recommended using Wilks’ Lambda when using the multivariate tests “for general use” (Pallant, 2010, p. 294). Using the variable LLC_Type section of the multivariate tests, the Wilks’ Lambda value was .666 with a significance value of .000 which is less than .05. This significance value indicates that there is a difference between the groups. Therefore, there was a statistically significant difference between the perceptions of discipline specific and non-discipline specific LLCs with respect to student engagement. An examination of the mean scores indicated that discipline specific LLC students reported more positive perceptions with respect to student engagement.

Because a statistical difference was found, the test of Between-Subject effects was displayed in the SPSS output file. To reduce Type I error, finding a significant result in error, the alpha level is reduced (Pallant, 2010). Therefore, a Bonferroni adjusted alpha level of .01 was used to measure the dependent variables individually (Tabachnick & Fidell, 2007). The variable that reached a statistical significance as a result was academic integration ($p = .001$), which had a significance value less than .01.

The effect size, partial eta squared, “represents the portion of the variance that can be explained by the independent variable” (Pallant, 2010, p. 295). Academic integration had a partial eta squared of .162 or 16.2 percent. An examination of the mean scores indicated that discipline specific LLC students reported more positive perceptions with respect to academic integration ($M = 3.823$, $SD = .79$) than non-discipline specific LLCs ($M = 3.168$, $SD = .72$).

DISCUSSION

The engagement of postsecondary at-risk students participating in living learning communities (LLCs) was the focus of this mixed methods study with a multiple case design. The investigation of student engagement of at-risk students in LLCs consisted of both quantitative and qualitative methods. Students who are classified as at-risk, including first generation and / or from families challenged by low income levels, were targeted for this research. Student perceptions of how their experiences facilitated integration into the university community are discussed. This section includes a summary of results, implications for practice, and recommendations for future research.

Summary of Results

Findings from this inquiry have the potential to contribute to theory, practice, policy, and future studies of learning communities in higher education. Overall, at-risk students that participated in LLCs were more engaged than their counterparts that did not participate in LLCs with respect to specific dimensions of student engagement. A general overview is provided of the findings related to academic integration, social integration, institutional climate, peer collaboration and personal growth, perceived beneficial LLC support opportunities, and LLC type defining characteristics.

Academic Integration

In this study, academic integration is defined by a student's "assimilation" into the postsecondary institution's academic life (Prospero & Vohra-Gupta, 2007, p. 966). Academic life in this study included, but was not limited to faculty connections, academic grades, study groups, and preparation for class. A comparison of at-risk student's perceptions who lived in LLCs with students who lived in traditional residence halls (TRH) regarding student engagement

was examined. There was a statistically significant difference between the perceptions of LLC and TRH students with respect to academic integration. LLC students reported more positive perceptions than TRH students with respect to their academic integration. LLC students received additional support and took advantage of opportunities that included faculty office hours at the LLC, rector advice and scheduling, interactions with peers who were scheduled in the same classes at the LLC, additional tutoring and supplemental instruction, and interactions with faculty outside of the classroom. Comments made by LLC students in relation to academic integration were positive in that they benefited from the program's intentional academic support and welcomed the interaction and academic assistance of faculty.

These findings contrast with the findings of Pike et al.'s (2011) national study that participation in a learning community did not increase student-faculty interactions with first generation college students. One explanation for this result could be that the data in the national study was aggregated over 39,000 first year students and 277 institutions and their meaning of a learning community was broad. The current study consists of one research intensive state university with the majority of students being in-state and is focused on the LLC type of learning communities. Engstrom and Tinto's (2008) national findings of increased engagement of at-risk students because of participation in LLCs is supported by the results of the current study. In addition, Kuh's (2007) national findings that students who participated in learning communities are more academically engaged than students that did not participate in learning communities is reinforced.

One of the benefits of this study is that two types of LLCs were compared: discipline specific and non-discipline specific. This responds to recommendations for future research to explore LLC types and their outcome differences (Inkelas & Soldner, 2011; Inkelas & Weisman,

2003). There was a statistically significant difference between student perceptions in discipline specific and non-discipline specific LLCs with respect to academic integration. Students who resided in discipline specific LLCs reported more positive perceptions of their academic engagement than did students residing in non-discipline specific LLCs. Pike et al. (2011) found that learning community engagement was strongly related to student-faculty interaction for first year students. One explanation provided from interviews with students revealed that some of the participating faculty in the discipline specific LLCs belonged to the students' academic colleges. These students are interacting with faculty that they also had a connection with during the course of their academic career and these faculty are likely to have in-depth knowledge of how to advise students to navigate through the remainder of their specific major coursework and career path.

These research findings contribute to the LLC literature by providing quantitative results supporting increased academic integration in relation to LLC type being specific to a student's academic major. However, the other dimensions of student engagement were not statistically significant when comparing LLC design type. The qualitative results of this study indicated that students were able to utilize the LLC regardless of type to establish positive faculty interaction, active peer study groups, connections in class with peers, and tutoring assistance.

Social Integration

In this study, social integration is defined by a student's "assimilation" into the postsecondary institution's social life (Prospero & Vohra-Gupta, 2007, p. 966). Social life in this study included but was not limited to LLC non-academic programs, program advertisement, student organizations and extracurricular activities, and residential college decision making. There was not a statistical significance difference between LLC and TRH students with respect

to social integration. Nor was there a statistical significance difference between discipline specific and non-discipline specific LLC type with respect to social integration. These findings contrast with Inkelas et al.'s (2007) findings of statistically significant smoother social transitions for LLC students than TRH students.

In the qualitative analysis for this study, students shared their positive experiences with social programs sponsored by their LLC. Some of these social programs included ice cream socials, crawfish boils, holiday parties, volunteer programs, resident assistant programs, and impromptu socials initiated by students and resident assistants. These students also emphasized the fact that because they lived on-campus it was easier and more convenient to participate in social activities. In particular, students explained, that living on-campus saved them commuting time, which enabled them to participate in these LLC social activities more often. This study's results supports Pike et al.'s (2011) findings that residential learning communities have a positive impact on first-year students and Astin's (1975, 1999) research that because students live on-campus they have extra time for involvement. However, there were students that mentioned they were not involved in social activities for various reasons such as lack of interest or time, evening class conflicts, membership in other student organizations, and other factors that restricted their involvement.

Institutional Climate

In this study, institutional climate refers to the influence institutions have on student learning and learning experiences (Upcraft & Gardner, 1989a). Institutional climate in this study included but was not limited to connections with LLC peers, campus belonging, LLC study climate, LLC experience, and university experience. There was a statistical difference between LLC and TRH students with respect to institutional climate. LLC students reported more

positive perceptions of institutional climate than TRH students. Inkelas et al.'s (2007) study placed institutional climate with perceived social transitions. Their research findings indicated shared confidence levels with institutional climate in relation to sense of belonging on-campus for both LLC students and TRH students. In addition, Inkelas et al. (2007) found more positive perceptions of smoother college transitions with LLC students than TRH students in the overall campus and residence hall climate section of their study. This study's research findings were consistent with their results for LLC students compared to TRH students. However, there was not a statistical significant difference between discipline specific and non-discipline specific LLC type with respect to institutional climate.

Data emerging from the individual and focus group interviews revealed that students had a positive response to their residential college experience. Students consistently recommended that incoming college students participate in LLCs their first year of college. Students attributed their feelings of belonging and feeling connected to the university to their on-campus residency. Students had these feelings because they mentioned that just living on-campus meant they were connected to the campus all of the time and people who lived off campus seemed disconnected. Jenhangir (2009) said that learning community environments must allow first generation and low income students the ability to develop "a sense of belonging" to the university (p. 48). This study provided qualitative evidence that students were able to develop a sense of belonging because of their LLC experiences with living on-campus.

Peer Collaboration and Personal Growth

In this study, peer collaboration is defined as practices that encourage cooperation and active learning among students (Chickering & Gamson, 1987). In addition, personal growth is defined by Magolda's (2001) self-authorship. Self-authorship is "the ability to construct our own

visions, to make informed decisions in conjunction with coworkers, to act appropriately, and take responsibility for those actions” (Magolda, 2001, p. 14).

Peer collaboration and personal growth in this study included but was not limited to change experienced in emotional maturity, personal growth, leadership skills, sense of life goals, study habits, and participation in student organizations and extracurricular activities because of LLC experience. There was not a statistical significant difference between LLC and TRH students with respect to peer collaboration and personal growth. In addition, based on survey items there was not a statistical significant difference between discipline specific and non-discipline specific LLC type with respect to peer collaboration and personal growth. However, during the individual interviews and focus groups students explained that they experienced change because of their LLC experiences in many areas, but specifically in leadership skills, study habits, sense of self, emotional maturity, and personal growth.

The development of leadership skills that LLC students experienced supports Kuh’s (2007) findings that participation in learning communities “early in college can launch students on a trajectory of achievement that benefits them both in college and beyond” (p. 124). Students commented about their experiences of becoming leaders among their peers. One student explained that he was not a leader in high school but his LLC experience helped him develop his leadership skills to become a leader among his peers. Another student discussed her leadership position in her sophomore year as a resident assistant as a result of her LLC experience.

Students’ change in study habits can support Strauss and Terenzini’s (2007) research that academic and out of class experiences make “unique contributions to student learning” (p. 988). In particular, in the qualitative portion of this study, students attributed outside academic

interactions with peer study groups, tutoring, and supplemental instruction to their changes in study habits. Some students indicated that these interactions taught them how to study and helped them to do better in their coursework.

This study's findings on sense of self, emotional maturity, and personal growth in relation to Magolda's (2001, 2003) research on self-authorship support the LLC environment being a conduit that can be used to facilitate this development process. Self-authorship is demonstrated in students' comments in these change areas of coming out of their shell, decreasing of shyness, growing up, realization and acceptance of others differences, and learned independence.

Perceived Beneficial LLC Support Opportunities

The LLC support opportunities offered to at-risk students in this study were designed to support all dimensions of student engagement. Students' perceptions about their experiences relevant to academic integration were more positive in LLC at-risk students compared with TRH at-risk students. Throughout the individual interviews and focus groups, students voiced countless positive comments of ability to form peer study groups because of their courses with LLC students in their buildings, convenience of in-house office hours with faculty, convenience of LLC sponsored events and activities where they were able to interact with both faculty and peers, opportunity for tutoring and supplemental instruction, ability to receive individual scheduling assistance from their LLC rector, and growth because of LLC in sense of self, emotional maturity, and personal growth.

The existence and student participation in the LLC support opportunities reinforced research by Engstrom and Tinto (2008) in that students felt a sense of belonging to the university, increased confidence because of peer collaboration opportunities, and were active

participants in their LLC. These findings also reinforce Tinto's (1987) argument that academic and social components must be integrated into student learning communities to develop the student more fully.

LLC Type Defining Characteristics

Throughout the individual interviews and focus groups a few distinctions were revealed in reference to LLC type. The first observation to note was the relationships with the faculty in discipline specific LLCs. As mentioned earlier in this section, students in discipline specific LLCs reported more positive perceptions with respect to academic integration than non-discipline specific LLC students. These students commented that they would interact with their faculty more regularly through LLC social and academic programs. For example, some of the students in the Science Residential College were able to meet their faculty's families at some LLC-sponsored events. A student in the Engineering Residential College developed a relationship with a faculty member who is now his current electrical engineering professor with whom he will continue to take classes throughout his college career. The Business and Science Residential College faculty were seen at many of the LLC-sponsored programs. The one student from the Mass Communication Residential College who participated in the focus groups said that she would interact a lot with her faculty at the School of Journalism.

The second notable observation was absence of faculty study sessions and study groups in the Honors House LLC. Furthermore, the Honors House students said that they did not receive any faculty tutoring sessions or supplemental instruction. One explanation of the absence of faculty tutoring sessions or supplemental instruction could be that the participants are high performing students who may not require extra assistance in their studies. These students also experience smaller class sizes in their honors courses, which may allow for in-depth class

discussion and more time for faculty to answer questions. However, students did mention if they had an issue they would visit faculty at their office hours. Most Honors House students mentioned that they preferred to study individually. This finding is consistent with Inkelas and Weisman's (2003) findings that:

Ironically, academic honors program participants indicated that they studied in groups less frequently than students in any other program or in the control group; these students may converse with one another on academic issues such as class assignments or a topic discussed in class, but tend to study more independently. (p. 346)

The observations of relationships with the faculty in discipline specific LLCs and the absence of faculty study sessions and study groups in the Honors House LLC were the only defining LLC type characteristics that this study discovered through quantitative and qualitative measures.

Implications for Practice

The findings from this study suggest several positive implications for practice for the institution, student housing administrators, and LLC program administrators. These include a second-year LLC program, co-curricular programming for TRHs, and an increase in students' major exploration in non-discipline specific LLCs. A second year program for the LLC students would continue the positive academic reinforcement and student engagement that comes from the LLC environment. However, a survey of the current students and past students of LLCs should be administered to gain information about their interest, perception of potential impact, and what programs might be beneficial throughout their academic career. Pike et al. (2011) stated that, "institutional leaders must think carefully about the student learning outcomes they want to develop or improve, and what types of student engagement are most likely to lead to those ends" (p. 316). Faculty and academic college support should be considered to increase academic integration and relevance. Depending on student interest, the second-year LLC program could be either discipline specific or non-discipline specific.

Co-curricular programming can be used for TRH students to enhance academic integration and institutional climate dimensions of student engagement. This recommendation aligns with Inkelas and Weisman's (2003) recommendation to add co-curricular programming "such as faculty-student lunches and cultural outings or student tutoring programs" (p. 359) for TRHs. For example, a query of student classes can be assessed each semester to identify common courses, and tutoring sessions with faculty or graduate assistants could be provided to these TRH students. These students' academic integration and institutional climate experiences of student engagement should be addressed by the institution's administrators. These students are entitled to the benefits of increased engagement that could lead to persistence and improved institutional retention rates.

A recommendation is given to increase students' exploration of their major field in non-discipline specific LLCs. This can be accomplished by the LLCs sponsoring events to allow students to explore different majors through programming with academic colleges and faculty. In addition, using digital signage technology to increase marketing and communication of events directly from specific academic colleges could enhance major interest and exploration. Rocconi (2011) said that "institutions interested in improving student learning by implementing learning communities should carefully consider how to structure their communities in order to promote student engagement" (p. 189). These implications for practice should be given consideration by higher education administrators, particularly those involved with LLCs and student housing.

Recommendations for Future Research

The results of this study indicate that there is a need for future research of LLC design type, student characteristics, research design, and longitudinal studies on the impact of retention and post-grad choices of at-risk students. The recommendation concerning LLC design type

includes a national investigation of LLC design types, support opportunities, and beneficial factors that are perceived valuable by students. Inkelas and Weisman (2003) argued that “program staff should continually assess several different types of academic interactions that participants are or should be involved with to ensure that target interactions and program objectives are being served” (p. 358). Attention should be given to special populations including women, minorities, and at-risk groups. More mixed methods and qualitative designs should be considered to help the researcher tell the stories of the students and give details of what program characteristics are valued.

Another recommendation for future research is a national longitudinal mixed methods study of low income and first generation students in relation to persistence and student engagement. This research would supplement the current study’s results by investigating whether these findings and themes are present through a national aggregated study over multiple universities and student groups. This would also test the findings of Pike et al. (2011) that learning communities are impactful to first-year students attending large institutions that have residential programs. In addition, it would provide another benefit of investigating special populations other than low income and first generation students such as women and minority groups.

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APPENDIX – A
STUDENT SURVEY PERMISSION EMAIL

From: StudentVoice Assessment <studentvoiceassessment1@studentvoice.com>
Sent: Tuesday, June 28, 2011 9:28 AM
To: Monique F Cain
Subject: RE: Shared Surveys

Monique,

Since these are shared projects on our site, you already have permission to use these surveys. They were developed by the institution, but also received assistance from StudentVoice on the design of the surveys.

Hofstra's survey was used in the Fall 2008 semester. Maine's survey was administered in Fall of 2009. Catholic's survey was administered in Fall 2010.

I cannot provide you with any information on the data collected. Data collected in our system is confidential and private to the institution that collected the data. The only thing that you have access to is the instruments used with these assessments.

Let me know what other questions you have.

Matt

Matthew J. Stuczynski, M.Ed.
Senior Coordinator, Campus Support
StudentVoice
(716) 652-9400, press 1 when you hear the recording
studentvoiceassessment1@studentvoice.com

APPENDIX – B

LLC STUDENT SURVEY

Demographic Information

1. With which gender do you identify?
 - ☐ Male
 - ☐ Female
 - ☐ Transgender

2. With which racial/ethnic category do you identify?
 - ☐ Asian/Pacific Islander
 - ☐ Black/African American
 - ☐ Latino(a)/Hispanic
 - ☐ Middle Eastern
 - ☐ Indigenous/Native American
 - ☐ White/Caucasian
 - ☐ Multicultural
 - ☐ I prefer not to respond to this question

3. Which Residential College did you participate in your first year:
 - ☐ Agriculture Residential College
 - ☐ Business Residential College
 - ☐ Engineering Residential College
 - ☐ General Residential College
 - ☐ Honors House LLC
 - ☐ Information Technology Residential College
 - ☐ Mass Communications Residential College
 - ☐ Science Residential College

4. Do you have a sibling attending college
 - ☐ Yes
 - ☐ No

5. What was your approximate overall/cumulative grade point average (GPA) at the end of your first year?
 - ☐ 3.50 - 4.00
 - ☐ 3.00 - 3.49
 - ☐ 2.50 - 2.99
 - ☐ 2.00 - 2.49

- 1.50 - 1.99
 - 1.00 - 1.49
 - 0.00 - 0.99
6. Do you currently work?
- Yes
 - No
7. If so, where do you work?
- On campus
 - Off campus
 - Both on and off campus
8. If so, on average, how many hours per week do you work?
- 1-5
 - 6-10
 - 11-15
 - 16-20
 - 21-25
 - 26-30

Thinking back on your residential college experience, for each of the following please indicate how living in your residential college contributed to your experience with each listed area.

1 – Not at all influential, 2 – Slightly influential, 3 – Somewhat influential,

4 – Very influential, 5 – Extremely influential

- 9. Academic performance (your grades)
- 10. Academic requirements
- 11. Amount of time spent preparing for class/studying
- 12. Feeling of belonging at university
- 13. Level of support and care shown by university
- 14. Participation in residential college community programs and events
- 15. Participation in university student organizations and extracurricular activities (sports, cultural, etc.)

Thinking back on your residential college experience, for each of the following please indicate your level of agreement with the following statements:

1-Strongly disagree, 2 – Disagree, 3-Neither agree or disagree, 4 – Agree, 5 – Strongly agree

- 16. I feel actively involved with my residential college community
- 17. I have had the opportunity to be involved with the decision making in the community
- 18. I felt comfortable studying in my residential college community
- 19. I discussed my classes with others living in my residential college community

Thinking back on your residential college experience, to what extent do you think each of the following residential college-specific activities or programs have contributed to a better experience for you as a sophomore student?

1-Not at all, 2- Slightly, 3-Moderately, 4-Considerably, 5- Significantly

- 20. Connections with Faculty
- 21. Connections with peers in your residential college classes
- 22. Advising with your residential college Rector
- 23. Study groups with residential college students
- 24. Participation in university student organizations and extracurricular activities (sports, cultural, etc.)

Thinking back on your residential college experience, please indicate the number of times you have used the following residential college services or opportunities:

1-Not at all, 2- one to three times, 3- four to six times , 4-seven to nine times, 5- 10 or more times

- 25. Peer mentoring by fellow residential college students
- 26. Peer study groups with fellow residential college students
- 27. Residential college community council
- 28. Residential College (RA) Resident Assistant Floor Programs (meetings, academic and social programming, etc.)
- 29. Residential College Community Wide Events / Programs (Crawfish bowl, faculty guest speaker, etc.)
- 30. Rector advising
- 31. Study Skills and Tips Program in your residential college building
- 32. Faculty tutoring in your residential college building
- 33. Faculty office hours in your residential college building
- 34. Faculty discussion groups in your residential college building
- 35. Mid-term or Finals study breaks / breakfasts

Thinking back on your residential college experience, To what extent do you think your residential college experience was impactful on the following opportunities

1-Not at all impactful, 2- Slightly impactful, 3-Moderately impactful,

4-Considerably impactful, 5- Significantly impactful

- 36. Having good friends at university
- 37. Connections with faculty
- 38. Connections with peers in your classes
- 39. Participation in university student organizations and extracurricular activities (sports, cultural, etc.)
- 40. Ability to manage all of your academic responsibilities and activities

Thinking back on your residential college experience, compared to when you first came to the university how has your residential college participation helped you to experience change in the following areas:

1-No change at all, 2- Slight change, 3-Moderate change,

4-Considerable change, 5- Significant change

- 41. Emotional maturity
- 42. Personal growth
- 43. Leadership skills
- 44. Knowledge about your anticipated major
- 45. Sense of life goals
- 46. Study habits
- 47. Socializing with peers
- 48. Participation in student organizations and extracurricular activities (sports, cultural, etc.)

Please indicate your level of satisfaction in the following questions.

1-Not at all, 2- Slightly, 3-Moderately, 4-Considerably, 5- Significantly

- 49. Overall, how satisfied were you with your first year residential college experience
- 50. Overall, how satisfied were you with your first year university experience

General Summary Questions:

51. Overall, how prepared are you for your sophomore year from your residential college experience
- ☐ 1 Not at all prepared
 - ☐ 2 Slightly prepared
 - ☐ 3 Moderately prepared
 - ☐ 4 Considerably prepared
 - ☐ 5 Significantly prepared
52. Do you have a declared major?
- ☐ Yes
 - ☐ No
53. Did participating in a residential college help you to choose or identify your major
- ☐ Yes
 - ☐ No
 - ☐ Major not selected
54. How confident are you that you will graduate with this major?
- ☐ Not at all confident
 - ☐ Slightly Confident
 - ☐ Moderately Confident
 - ☐ Considerably confident
 - ☐ Significantly Confident
 - ☐ Major not selected
55. List your Major (Open-ended)
56. Describe one of your experiences in your residential college / honors house that was beneficial to you in your class work. (Open-ended)

APPENDIX – C

TRH STUDENT SURVEY

Demographic Information

1. With which gender do you identify?
 - ☐ Male
 - ☐ Female
 - ☐ Transgender

2. With which racial/ethnic category do you identify?
 - ☐ Asian/Pacific Islander
 - ☐ Black/African American
 - ☐ Latino(a)/Hispanic
 - ☐ Middle Eastern
 - ☐ Indigenous/Native American
 - ☐ White/Caucasian
 - ☐ Multicultural
 - ☐ I prefer not to respond to this question

3. Which Residence Hall did you live in your first year:
 - ☐ Residence Hall A
 - ☐ Residence Hall B
 - ☐ Residence Hall C
 - ☐ Residence Hall D
 - ☐ Residence Hall E
 - ☐ Residence Hall F
 - ☐ Residence Hall G
 - ☐ Residence Hall H
 - ☐ Residence Hall I
 - ☐ Residence Hall J
 - ☐ Residence Hall K
 - ☐ Residence Hall L

4. Do you have a sibling attending college
 - ☐ Yes
 - ☐ No

5. What was your approximate overall/cumulative grade point average (GPA) at the end of your first year?

- 3.50 - 4.00
 - 3.00 - 3.49
 - 2.50 - 2.99
 - 2.00 - 2.49
 - 1.50 - 1.99
 - 1.00 - 1.49
 - 0.00 - 0.99
6. Do you currently work?
- Yes
 - No
7. If so, where do you work?
- On campus
 - Off campus
 - Both on and off campus
8. If so, on average, how many hours per week do you work?
- 1-5
 - 6-10
 - 11-15
 - 16-20
 - 21-25
 - 26-30

Thinking back on your residence hall experience, for each of the following please indicate how living in your residence hall contributed to your experience with each listed area.

1 – Not at all influential, 2 – Slightly influential, 3 – Somewhat influential,

4 – Very influential, 5 – Extremely influential

- 9. Academic performance (your grades)
- 10. Academic requirements
- 11. Amount of time spent preparing for class/studying
- 12. Feeling of belonging at university
- 13. Level of support and care shown by university
- 14. Participation in residence hall community programs and events

15. Participation in university student organizations and extracurricular activities (sports, cultural, etc.)

Thinking back on your residence hall experience, for each of the following please indicate your level of agreement with the following statements:

1-Strongly disagree, 2 – Disagree, 3-Neither agree or disagree, 4 – Agree, 5 – Strongly agree

16. I feel actively involved with my residence hall community
17. I have had the opportunity to be involved with the decision making in the community
18. I felt comfortable studying in my residence hall community
19. I discussed my classes with others living in my residence hall community

Thinking back on your residence hall experience, to what extent do you think each of the following residence hall-specific activities or programs have contributed to a better experience for you as a sophomore student?

1-Not at all, 2- Slightly, 3-Moderately, 4-Considerably, 5- Significantly

20. Connections with Faculty
21. Connections with peers in your classes
22. Advising with your college advisor
23. Study groups with residence hall students
24. Participation in university student organizations and extracurricular activities (sports, cultural, etc.)

Thinking back on your residence hall experience, please indicate the number of times you have used the following residence hall services or opportunities:

1-Not at all, 2- one to three times, 3- four to six times , 4-seven to nine times, 5- 10 or more times

25. Peer mentoring by fellow residence hall students
26. Peer study groups with fellow residence hall students
27. Residence hall community council
28. Residence hall (RA) Resident Assistant Floor Programs (meetings, academic and social programming, etc.)
29. Residence hall Community Wide Events / Programs (Crawfish bowl, faculty guest speaker, etc.)
30. College advising

- 31. Study Skills and Tips Program in your residence hall building
- 32. Faculty tutoring
- 33. Faculty office hours
- 34. Faculty discussion groups in your residence hall building
- 35. Mid-term or Finals study breaks / breakfasts

Thinking back on your residence hall experience, To what extent do you think your residence hall experience was impactful on the following opportunities

**1-Not at all impactful, 2- Slightly impactful, 3-Moderately impactful,
4-Considerably impactful, 5- Significantly impactful**

- 36. Having good friends at university
- 37. Connections with faculty
- 38. Connections with peers in your classes
- 39. Participation in university student organizations and extracurricular activities (sports, cultural, etc.)
- 40. Ability to manage all of your academic responsibilities and activities

Thinking back on your residence hall experience, compared to when you first came to the university how has your residence hall participation helped you to experience change in the following areas:

**1-No change at all, 2- Slight change, 3-Moderate change,
4-Considerable change, 5- Significant change**

- 41. Emotional maturity
- 42. Personal growth
- 43. Leadership skills
- 44. Knowledge about your anticipated major
- 45. Sense of life goals
- 46. Study habits
- 47. Socializing with peers
- 48. Participation in student organizations and extracurricular activities (sports, cultural, etc.)

Please indicate your level of satisfaction in the following questions.

1-Not at all, 2- Slightly, 3-Moderately, 4-Considerably, 5- Significantly

49. Overall, how satisfied were you with your first year residence hall experience

50. Overall, how satisfied were you with your first year university experience

General Summary Questions:

51. Overall, how prepared are you for your sophomore year from your residence hall experience

- ☐ 1 Not at all prepared
- ☐ 2 Slightly prepared
- ☐ 3 Moderately prepared
- ☐ 4 Considerably prepared
- ☐ 5 Significantly prepared

52. Do you have a declared major?

- ☐ Yes
- ☐ No

53. Did participating in a residence hall help you to choose or identify your major

- ☐ Yes
- ☐ No
- ☐ Major not selected

54. How confident are you that you will graduate with this major?

- ☐ Not at all confident
- ☐ Slightly Confident
- ☐ Moderately Confident
- ☐ Considerably confident
- ☐ Significantly Confident
- ☐ Major not selected

55. List your Major (Open-ended)

56. Describe one of your experiences in your residence hall that was beneficial to you in your class work. (Open-ended)

APPENDIX – D RESEARCH STUDY CONSENT FORM

Study Title: Exploring student engagement of at-risk students: A multi-program evaluation of postsecondary living learning communities by examining students' perceptions

Performance Site: Louisiana State University

Investigator: Monique F. Cain, 225.578.6962, mfondre@lsu.edu
Available M – F 8:00 am – 4:30 pm

Purpose of the Study: The purpose of this study is to explore LLC at-risk students' perception of their student engagement encompassing academic and social integration, institutional climate, peer collaboration and personal growth, and beneficial LLC components.

Subject Inclusion: Participants of the Louisiana State University's Living Learning Communities

Number of subjects: 3 focus groups, 5-7 students per group

Study Procedures: Data collection will include face-to-face interviews with living learning community participants. Participants will be interviewed with approved interview protocol questions.

Benefits: This study is expected to act as a conduit to increase knowledge about student engagement of at-risk students and help to clearly define beneficial LLC components.

Risks: N/A

Right to Refuse: Participation in the study is voluntary and that subjects may change their mind and withdraw from the study at any time without penalty or loss of any benefit to which they may otherwise be entitled.

Privacy: Results of the study may be published, but no names or identifying information will be included in the publication. Subject identity will remain confidential unless disclosure is required by law.

Signatures: The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigators. If I have questions about subjects' rights or other concerns, I can contact Robert C. Mathews, Institutional Review Board, (225) 578-8692. I agree to participate in the study described above and acknowledge the investigator's obligation to provide me with a signed copy of this consent form.

Signature of Subject

Date

APPENDIX – E

INSTITUTIONAL REVIEW BOARD APPLICATION FORM

Application for Exemption from Institutional Oversight

Unless qualified as meeting the specific criteria for exemption from Institutional Review Board (IRB) oversight, ALL LSU research/ projects using living humans as subjects, or samples, or data obtained from humans, directly or indirectly, with or without their consent, must be approved or exempted in advance by the LSU IRB. This Form helps the PI determine if a project may be exempted, and is used to request an exemption.



Institutional Review Board
Dr. Robert Mathews, Chair
131 David Boyd Hall
Baton Rouge, LA 70803
P: 225.578.8692
F: 225.578.6792
irb@lsu.edu
lsu.edu/irb

-- Applicant, Please fill out the application in its entirety and include the completed application as well as parts A-E, listed below, when submitting to the IRB. Once the application is completed, please submit two copies of the completed application to the IRB Office or to a member of the Human Subjects Screening Committee. Members of this committee can be found at <http://www.lsu.edu/screeningmembers.shtml>

-- A Complete Application Includes All of the Following:

(A) Two copies of this completed form and two copies of part B thru E.

(B) A brief project description (adequate to evaluate risks to subjects and to explain your responses to Parts 1&2)

(C) Copies of all instruments to be used.

*If this proposal is part of a grant proposal, include a copy of the proposal and all recruitment material.

(D) The consent form that you will use in the study (see part 3 for more information.)

(E) Certificate of Completion of Human Subjects Protection Training for all personnel involved in the project, including students who are involved with testing or handling data, unless already on file with the IRB. Training link: (<http://phrp.njhtaining.com/users/login.php>.)

(F) IRB Security of Data Agreement: (<http://www.lsu.edu/irb/IRB%20Security%20of%20Data.pdf>)

1) Principal Investigator: Monique F. Cain

Rank: LSU Graduate Student

Dept: ETPP

Ph: 225.578.6962

E-mail: mfondre@lsu.edu

2) Co Investigator(s): please include department, rank, phone and e-mail for each

Dr. S. Kim MacGregor, Associate Professor, ETPP, 225.578.2150, smacgre@lsu.edu

IRB# ES762 LSU Proposal # _____

☒ Complete Application

☒ Human Subjects Training

3) Project Title:

Proposal and Dissertation Research for Living Learning Communities

Study Exempted By:

Dr. Robert C. Mathews, Chairman
Institutional Review Board
Louisiana State University
203 B-1 David Boyd Hall
225-578-8692 | www.lsu.edu/irb
Exemption Expires: 1-3-2014

4) Proposal? (yes or no) ☐

If Yes, LSU Proposal Number _____

Also, if YES, either

☐ This application completely matches the scope of work in the grant

OR

☐ More IRB Applications will be filed later

5) Subject pool (e.g. Psychology students) Living Learning Community Students

*Circle any "vulnerable populations" to be used: (children <18; the mentally impaired, pregnant women, the aged, other). Projects with incarcerated persons cannot be exempted.

6) PI Signature Monique F. Cain

Date 10/31/2011 (no per signatures)

** I certify my responses are accurate and complete. If the project scope or design is later changes, I will resubmit for review. I will obtain written approval from the Authorized Representative of all non-LSU institutions in which the study is conducted. I also understand that it is my responsibility to maintain copies of all consent forms at LSU for three years after completion of the study. If I leave LSU before that time the consent forms should be preserved in the Departmental Office.

Screening Committee Action: Exempted ☒ Not Exempted _____ Category/Paragraph 2

Reviewer S. Kim MacGregor Signature S. Kim MacGregor Date 1/4/2011

APPENDIX – F
STUDENT DEMOGRAPHIC INFORMATION

	Discipline Specific LLC	Non-Discipline Specific LLC	TRH
GPA			
4.00 – 3.00	21	25	28
2.99 – 2.00	15	8	14
1.99 – 1.00	0	0	2
0.00 – 0.99	0	1	0
Gender			
Male	19	6	10
Female	17	28	34
Race			
White / Caucasian	26	23	30
Black / African American	5	3	10
Other	5	8	4
Sibling Currently in College			
Yes	4	12	15
No	32	22	29
Currently Working			
Yes	27	22	23
No	9	12	21

APPENDIX – G
RESIDENTIAL ENVIRONMENT ONE-WAY MULTIVARIATE ANALYSIS OF VARIANCE

Box's Test of Equality of Covariance Matrices^a

Box's M	10.566
F	1.013
df1	10
df2	39080.982
Sig.	.429

Levene's Test of Equality of Error Variances^a

	F	df1	df2	Sig.
Academic Integration	.039	1	112	.844
Social Integration	.001	1	112	.982
Institutional Climate	1.469	1	112	.228
Peer Collaboration	1.050	1	112	.308

Multivariate Tests^b

Effect		Value	F	Hypothesis df	Error df
Intercept	Pillai's Trace	.956	591.854 ^a	4.000	109.000
	Wilks' Lambda	.044	591.854 ^a	4.000	109.000
	Hotelling's Trace	21.719	591.854 ^a	4.000	109.000
	Roy's Largest Root	21.719	591.854 ^a	4.000	109.000
Environmnet_Type	Pillai's Trace	.326	13.205 ^a	4.000	109.000
	Wilks' Lambda	.674	13.205 ^a	4.000	109.000
	Hotelling's Trace	.485	13.205 ^a	4.000	109.000
	Roy's Largest Root	.485	13.205 ^a	4.000	109.000

Multivariate Tests^b

Effect		Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.000	.956
	Wilks' Lambda	.000	.956
	Hotelling's Trace	.000	.956
	Roy's Largest Root	.000	.956
Environmnet_Type	Pillai's Trace	.000	.326
	Wilks' Lambda	.000	.326
	Hotelling's Trace	.000	.326
	Roy's Largest Root	.000	.326

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F
Corrected Model	Academic Integration	9.375 ^a	1	9.375	14.194
	Social Integration	.391 ^b	1	.391	.611
	Institutional Climate	6.762 ^c	1	6.762	7.353
	Peer Collaboration	.162 ^d	1	.162	.120
Intercept	Academic Integration	1114.021	1	1114.021	1686.539
	Social Integration	1277.393	1	1277.393	1993.996
	Institutional Climate	1501.484	1	1501.484	1632.630
	Peer Collaboration	1089.765	1	1089.765	803.862
Environmnet_Type	Academic Integration	9.375	1	9.375	14.194
	Social Integration	.391	1	.391	.611
	Institutional Climate	6.762	1	6.762	7.353
	Peer Collaboration	.162	1	.162	.120
Error	Academic Integration	73.980	112	.661	
	Social Integration	71.749	112	.641	
	Institutional Climate	103.003	112	.920	
	Peer Collaboration	151.834	112	1.356	
Total	Academic Integration	1308.192	114		
	Social Integration	1430.406	114		
	Institutional Climate	1742.490	114		
	Peer Collaboration	1295.163	114		
Corrected Total	Academic Integration	83.356	113		
	Social Integration	72.141	113		
	Institutional Climate	109.765	113		
	Peer Collaboration	151.997	113		

Tests of Between-Subjects Effects

Source	Dependent Variable	Sig.	Partial Eta Squared
Corrected Model	Academic Integration	.000	.112
	Social Integration	.436	.005
	Institutional Climate	.008	.062
	Peer Collaboration	.730	.001
Intercept	Academic Integration	.000	.938
	Social Integration	.000	.947
	Institutional Climate	.000	.936
	Peer Collaboration	.000	.878
Envrinment_Type	Academic Integration	.000	.112
	Social Integration	.436	.005
	Institutional Climate	.008	.062
	Peer Collaboration	.730	.001
Error	Academic Integration		
	Social Integration		
	Institutional Climate		
	Peer Collaboration		
Total	Academic Integration		
	Social Integration		
	Institutional Climate		
	Peer Collaboration		
Corrected Total	Academic Integration		
	Social Integration		
	Institutional Climate		
	Peer Collaboration		

Descriptive Statistics

	Residential Environment	Mean	Std. Deviation	N
Academic Integration	LLC	3.5052	.81835	70
	Residence Hall	2.9161	.80364	44
	Total	3.2778	.85887	114
Social Integration	LLC	3.4982	.81051	70
	Residence Hall	3.3778	.78387	44
	Total	3.4518	.79901	114
Institutional Climate	LLC	3.9776	.90208	70
	Residence Hall	3.4773	1.04386	44
	Total	3.7845	.98558	114
Peer Collaboration	LLC	3.1367	1.10668	70
	Residence Hall	3.2143	1.25129	44
	Total	3.1667	1.15979	114

APPENDIX – H **LLC TYPE ONE-WAY MULTIVARIATE ANALYSIS OF VARIANCE**

**Box's Test of
Equality of
Covariance
Matrices^a**

Box's M	11.666
F	1.092
df1	10
df2	21934.970
Sig.	.364

Levene's Test of Equality of Error Variances^a

	F	df1	df2	Sig.
Academic Integration	.077	1	68	.782
Social Integration	.261	1	68	.611
Institutional Climate	1.607	1	68	.209
Peer Collaboration	.128	1	68	.721

Multivariate Tests^b

Effect		Value	F	Hypothesis df	Error df
Intercept	Pillai's Trace	.970	524.897 ^a	4.000	65.000
	Wilks' Lambda	.030	524.897 ^a	4.000	65.000
	Hotelling's Trace	32.301	524.897 ^a	4.000	65.000
	Roy's Largest Root	32.301	524.897 ^a	4.000	65.000
LLC_Type	Pillai's Trace	.334	8.164 ^a	4.000	65.000
	Wilks' Lambda	.666	8.164 ^a	4.000	65.000
	Hotelling's Trace	.502	8.164 ^a	4.000	65.000
	Roy's Largest Root	.502	8.164 ^a	4.000	65.000

Multivariate Tests^b

Effect		Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.000	.970
	Wilks' Lambda	.000	.970
	Hotelling's Trace	.000	.970
	Roy's Largest Root	.000	.970
LLC_Type	Pillai's Trace	.000	.334
	Wilks' Lambda	.000	.334
	Hotelling's Trace	.000	.334
	Roy's Largest Root	.000	.334

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F
Corrected Model	Academic Integration	7.497 ^a	1	7.497	13.169
	Social Integration	.244 ^b	1	.244	.368
	Institutional Climate	3.360 ^c	1	3.360	4.329
	Peer Collaboration	1.313 ^d	1	1.313	1.073
Intercept	Academic Integration	854.765	1	854.765	1501.446
	Social Integration	855.101	1	855.101	1289.739
	Institutional Climate	1103.078	1	1103.078	1420.951
	Peer Collaboration	686.458	1	686.458	561.085
LLC_Type	Academic Integration	7.497	1	7.497	13.169
	Social Integration	.244	1	.244	.368
	Institutional Climate	3.360	1	3.360	4.329
	Peer Collaboration	1.313	1	1.313	1.073
Error	Academic Integration	38.712	68	.569	
	Social Integration	45.084	68	.663	
	Institutional Climate	52.788	68	.776	
	Peer Collaboration	83.194	68	1.223	
Total	Academic Integration	906.256	70		
	Social Integration	901.953	70		
	Institutional Climate	1163.612	70		
	Peer Collaboration	773.245	70		
Corrected Total	Academic Integration	46.209	69		
	Social Integration	45.328	69		
	Institutional Climate	56.148	69		
	Peer Collaboration	84.508	69		

Tests of Between-Subjects Effects

Source	Dependent Variable	Sig.	Partial Eta Squared
Corrected Model	Academic Integration	.001	.162
	Social Integration	.546	.005
	Institutional Climate	.041	.060
	Peer Collaboration	.304	.016
Intercept	Academic Integration	.000	.957
	Social Integration	.000	.950
	Institutional Climate	.000	.954
	Peer Collaboration	.000	.892
LLC_Type	Academic Integration	.001	.162
	Social Integration	.546	.005
	Institutional Climate	.041	.060
	Peer Collaboration	.304	.016
Error	Academic Integration		
	Social Integration		
	Institutional Climate		
	Peer Collaboration		
Total	Academic Integration		
	Social Integration		
	Institutional Climate		
	Peer Collaboration		
Corrected Total	Academic Integration		
	Social Integration		
	Institutional Climate		
	Peer Collaboration		

Descriptive Statistics

	Residential College Type	Mean	Std. Deviation	N
Academic Integration	Discipline Specific	3.8232	.78503	36
	Non-Discipline Specific	3.1684	.72075	34
	Total	3.5052	.81835	70
Social Integration	Discipline Specific	3.5556	.78116	36
	Non-Discipline Specific	3.4375	.84793	34
	Total	3.4982	.81051	70
Institutional Climate	Discipline Specific	4.1905	.78022	36
	Non-Discipline Specific	3.7521	.97673	34
	Total	3.9776	.90208	70
Peer Collaboration	Discipline Specific	3.2698	1.10908	36
	Non-Discipline Specific	2.9958	1.10292	34
	Total	3.1367	1.10668	70

VITA

Monique Fondren Cain was born in New Orleans, Louisiana, and raised in Chicago, Illinois. She attended high school in Culver, Indiana, at Culver Academies boarding school. She earned a Bachelor of Science degree in information systems and decision sciences in the fall of 2000. After completing this degree, she accepted a professional staff position with the Department of Residential Life at Louisiana State University. She was promoted to the Information Systems Manager position in the spring of 2004 and then earned a Master of Public Administration in the fall of 2005. Her continued quest for knowledge and eagerness to improve student success in postsecondary education led her to pursue a Doctor of Philosophy degree. Cain earned a doctorate in educational leadership and research with an emphasis on Higher Education Administration and a minor in Public Administration from Louisiana State University in May of 2012, completing a dissertation that examined the postsecondary engagement of at-risk students in living learning communities.